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EASTERN APHIDS
A FEW SPECIES OF PROCIPHILUS.

This Bulletin contains a brief account of certain migratory aphids; and Part V of the Aphid Food Plant Catalogue, including plants from the Rose Family to the Parsley Family.

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CHEMISTRY

[†] In collaboration with U. S. Department of Agriculture.

BULLETIN 270

EASTERN APHIDS: A FEW SPECIES OF PROCIPHILUS.*

EDITH M. PATCH.

There is evidently still considerable work to be done with the migratory Pemphiginae before we have their life histories in hand. Among the single genus *Prociphilus* in the Eastern States alone, several unfinished problems are presented. In fact, the complete American food cycle has been ascertained for but two of the species found in New England,—*P. tessellata† and P. venafuscus*.

The second of these, indeed, was not definitely located as to its summer residence until two years ago when the writer secured winged material from pupae collected on the roots of young balsam fir, October 19, 1915 (144-15), though this tree had been under suspicion for several years.‡

P. xylostei, to be sure, has been recorded as a root form on "Fichten" (Tullgren 1909, p. 93) for Europe and its habits in America are not likely to be different.

Besides *P. venafuscus*, we have two ash species in the East, *P. fraxinifolii* and *P. approximatus*, the alternate host of neither having yet been reported.

That the several species already mentioned are all easily to be distinguished, a little study of Figure 5 will show.

^{*}Papers from the Maine Agricultural Experiment Station: Entomology No. 97.

^{†1908.} Entomological News. p. 484.

^{‡1913.} Maine Agricultural Experiment Station, Bulletin 207, p. 448.

Figure 4, however, includes some features that concern problems still unsolved. 164-12 represents the fall migrant of a species found congregating in enormous numbers about the base of a mountain ash tree (*Pyrus* sp) on the University of Maine Campus. This has never been taken by the writer except in 1912. It is apparently *P. fitchii* Baker and Davidson, as it closely resembles the type slide of *P. pyri* (Fitch). In structure it is nearer to *P. venafuscus* than to any other species.

Figure 4 (2-15) shows the antenna of the apterous viviparous female of a root species, common on certain Compositae in Maine, which I have considered to be Trama erigeronensis. That this is the root form of a species present in Spring upon other vegetation from which it migrates, seems probable. Individuals with wing pads in the underground colonies are frequently found, which would indicate a return fall migration; but I have only once succeeded in obtaining the mature winged forms, (78-06). The antenna and thoracic waxplates of this collection are given in Figure 4. If I am correct in my determination this fall migrant proves that erigeronensis should be withdrawn from Trama and placed in the genus Prociphilus. This insect comes nearer to P. corrugatans migrating from Crataegus or P. alnifoliae from Amelanchier than to any other member of the genus known to me; and it may be discovered that the so called Trama erigeronensis is the summer root form of a species migrating from hawthorn or Juneberry. So much variety exists in migrants from these two plants that I am not at present confident that only two species are concerned. I do not yet know what the specific characters are as any I have tried to use for separation of these migrants seem to merge more or less.

This brief paper is written as a report of the present status of this group in the East, in the hope that what slight new data it contains may fit in with information which may be available elsewhere. At any rate, eleven years seems long enough to with-hold the winged form of *P. (Trama) erigeronensis* unpublished, in continued hope of linking it definitely into some incomplete cycle.

FOOD PLANT CATALOGUE OF THE APHIDAE OF THE WORLD.

PART V.*

EDITH M. PATCH.

PITTOSPORACEAE.

PITTOSPORUM.

P. eugenioides A. Cunn. Tarata.

Aphis pomi DeGeer. Essig, 1917a, p. 341.

Rhopalosiphum persicae (Sulzer). Essig, 1917a, p. 332.

P. tobira. Japanese Pittosporum.

Mocrasiphum solanifolii (Ashmead). Essig, 1917a, p. 329. Rhopalosiphum persicae (Sulzer). Essig, 1917a, p. 331.

P. tenuifolium Gaertn. Tawhiwhi.

Aphis pomi DeGeer. Essig, 1917a, p. 341.

P. undulatum Vent. Victorian Box.

Rhopalosiphum persicae (Sulzer). Essig, 1917a, p. 332.

ROSACEAE. ROSE FAMILY.

ACAENA.

A. splendens Vahl.

Myzus michaelseni Schouteden. Schouteden, 1904, p. 3. Rhopalosiphum acaenae Schouteden. Schouteden, 1904, p. 4.

AGRIMONIA. Agrimony.

A. eupatoria L.

Nectarophora agrimoniclla Cockerell. Cockerell, 1903a, p. 168.

AMELANCHIER. Juneberry.

A. alnifolia Nutt.

Illinoia macrosiphum Wilson. Wilson, 1912a, p. 155.

Pemphigus alnifoliae Williams. Williams, 1910 (1911), p. 7.

Prociphilus corrugatans (Sirrine). Quaintance & Baker, 1917, p. 19.

A. canadensis (L.) Medic. Shad Bush. Service Berry. Prociphilus corrugatans (Sirrine). Patch, 1915c, p. 253.

^{*}Papers from the Maine Agricultural Experiment Station: Entomology No. 98.

COTONEASTER.

C. franchetii Bois.

Aphis pomi DeGeer. Essig, 1917a, p. 341.

C. vulgaris.

Aphis pomi DeGeer (mali Fabricius non Oestlund etc.) (oxyacanthae Schrank non Koch) (padi Sanderson non Linnaeus) (pyri Kittel non Boyer, Koch etc.), Theobald, 1916a, p. 176.

C. sp.

Aphis pomi DeGeer. (mali Fab.) (aucupariae Buckton) (crataegi Buckton), van der Goot, 1915, p. 210.

CRATAEGUS. Hawthorn.

C. Azarolus L.

Aphis crataegi Kalt. (pyri Koch). Passerini, 1863, p. 35.

Prociphilus corrugatans (Sirrine). Quaintance & Baker, 1917, p. 19.

C. coccinea L.

Aphis crataegifoliae Fitch. Monell, 1879, p. 21.

Aphis (Adactynus) crataegus-coccinea Rafinesque, Rafinesque, 1818.

Siphocoryne avenae (Fab.) (mali Fitch) (avenae Fitch) (prunifoliae Fitch) (annuae Oestlund) (fitchii Sanderson) (Siphonophora avenae Thos. in part), Pergande, 1904a, p. 8.

Siphonophora crataegi Monell. Monell, 1879, p. 21.

C. crusgalli (lucida).

Aphis mali Fab. (A. pomi DeGeer) (A. oxyacanthae Schrank), Passerini, 1863, p. 40.

Eriosoma lanigera (Hausmann) (Schizoneura crataegi Oestlund), Becker 1918a, p. 255.

Pemphigus corrugatans Sirrine. Gillette, 1909a, p. 355.

C. macrocapetra.

Pemphigus corrugatans Sirrine. Gillette, 1909a, p. 355.

C. monogyna.

Aphis pomi DeGeer. (mali Fabricius non Oestlund etc.) (oxyacanthae Schrank non Koch) (padi Sanderson non Linnaeus) (pyri Kittel non Boyer, Koch), Theobald, 1916a, p. 176.

C. occidentalis.

Pemphigus corrugatans Sirrine. Gillette, 1909a, p. 355.

C. oxyacantha L. English Hawthorn.

Aphis cratacgi Kalt. Buckton, 2, p. 37.

Aphis cratacgi Kalt. (pyri Koch), Ferrari, 1872, p. 62.

Aphis cratacgi Kalt. (non Koch) (non Buckton), Theobald, 1911-1912.

Aphis crataegi Koch. Koch, p. 64.

Aphis crataegiella Theobald. (crataegi Buckton non Kaltenbach), Theobald, 1911-1912.

Aphis crataegifoliae Fitch. Davidson, 1910, p. 377.

Aphis mali Fab. (A. pomi DeGeer) (A. oxyacanthae Schrank), Passerini, 1863, p. 40.

Aphis mali Fab. (Puceron du pomier Gotze) (pomi DeGeer) Buckton, 2, p. 46.

Aphis oxyacanthae Koch. Buckton, 2, p. 37.

Aphis pomi DeGeer. (mali Fabricius non Oestlund etc.) (oxyacanthae Schrank non Koch) (padi Sanderson non Linnaeus) (pyri Kittel non Boyer, Koch), Theobald, 1916a, p. 176.

Aphis rumicis L. (evonymi Fab.) (papaveris Fab.) (atriplicis Fab.) (genistae Scopoli), van der Goot, 1915, p. 224.

Dentatus (Aphis) crataegi Kalt. (pyri Boyer) (ranunculi Kalt.) van der Goot, 1915, p. 176.

Macrosiphum crataegaria (Walker) (non Buckton). Theobald, 1913, Jour. Econ. Biol., Vol. 8, p. 53.

Ovatus (Mysus) mespili van der Goot. van der Goot, 1915, p. 138. Prociphilus crataegi Tull. Tullgren, 1909, p. 102.

Siphonaphis padi L. (avenae Fab.) van der Goot, 1915, p. 244. Tetraneura ulmi Geoffrey. (Aphis). Ferrari, 1872, p. 83.

Myzus oxyacanthae (Koch). Bayer, 1914a, p. 142.

C. punctata Jacq.

Aphis crataegifoliae Fitch. Thomas, 1879, p. 101. Schizoneura crataegi Oestlund. Oestlund, 1887, p. 28.

C. tomentosus L.

Aphis crataegifoliae Fitch. Sanborn, 1904, p. 53. Schizoneura crataegi Oestlund. Williams, 1910, p. 20.

C. sp.

Aphis avenae (Fab.). Patch, 1915c, p. 256. Aphis bakeri Cowen. (cephalicola Cowen). Gillette and Taylor, 1908, p. 28.

Aphis brevis Sanderson. Patch, 1915c, p. 257.

Aphis crataegifoliae Fitch. Quaintance and Baker, 1917, p. 18.

Aphis edentula Buckton. Buckton, 2, p. 41.

Aphis marutae Oestlund. Hunter, 1901, p. 101.

Pemphigus corrugatans Sirrine. Jackson, 1908, p. 216.

Schizoneura lanigera Hausmann (S. americana in part, of authors) Patch, 1912a, p. 395.

CRATAEGO-MESPILUS. (hybrid).

C.-Mespilus.

Aphis crataegi Buckton. Lingelsheim, 1916a. Myzus oxyacanthae Koch. Lingelsheim, 1916a.

DUCHESNEA. Indian Strawberry.

D. indica (And). Focke (Fragaria indica).

Aphis gossypii Glover. (citrifolii Ashm. In part) (citrulli Ashm.) (cucumeris Forbes) (forbesi Weed?), Pergande, 1895, p. 314.

ERIOBOTRYA.

E. japonica Lindl.

Aphis eriobotryae Schouteden. Schouteden, 1905a, p. 165.

FILIPENDULA.

F. ulmaria (L.). Maxim (Ulmaria ulmaria L) (Spiraea ulmaria) (Spirla by misprint) Queen of the Meadow.

Aphis spiraeella Schouteden. (schoutedeni Kirkaldy) (spireae Schouteden nec Oestlund) Schouteden, 1906a, p. 228,

Siphonophora pisi Kalt. Buckton, 1, p. 135.

Siphonophora ulmariae (Schrank, Walker) (onobrychis Boyer) (pisi Kalt.) (pisi Koch) (gei Koch), Passerini, 1863, p. 13.

FRAGARIA. Strawberry.

- F. indica. See Duchesnea indica.
- F. vesca L.

Aphis chloris Koch. Passerini, 1863, p. 39.

Aphis fragariae Walker. Walker, 1848b, p. 431.

Rhizobius sonchi Pass. Kaltenbach, 1874, p. 484.

Siphonophora fragariae Koch. Buckton, 1, p. 126.

F. virginiana Duchne.

Aphis sp. Sanborn, 1904, p. 63.

Myzus porosus Sanderson. Patch, 1915c, p. 258.

F. sp.

Aphis aparines Fab. Williams, 1891, p. 24.

Aphis forbesi Weed. Weed, 1888, p. 273.

Aphis fragariae Koch. Kaltenbach, 1874, p. 231.

Aphis gossypii Glover. (citrifolii Ashm. in part) (citrulli Ashm.) (cucumeris Forbes) (forbesi Weed?), Pergande, 1895, p. 314.

Aphis maidiradicis Forbes. Vickery, 1910, p. 111.

Macrosiphum fragariellum Theobald. (S. fragariella), Cockerell, 1905, p. 309; Theobald, 1913, Jour, Econ. Biol. Vol. 8, p. 53.

Macrosiphum rogersii Theobald. Theobald, 1913, Jour. Econ. Biol. Vol. 8, p. 53.

Macrosiphum trifolii Pergande. Pergande, 1904a, p. 22.

Myzus fragaefolii Cockerell. Cockerell, 1901a, p. 101.

Myzus fragariae Theobald. Theobald, 1912.

Myzus porosus Sanderson. Sanderson, 1900, p. 205.

Siphonophora fragariae var. immaculata Riley. Pergande, 1904a, p. 22.

Siphonophora minor Forbes. Forbes, 1884, p. 79.

GEUM. Avens.

G. urbanum L.

Macrosiphum gei Koch. Theobald, 1913, p. 53.

Macrosiphum ulmariae (Schrank) (gei Koch) (urticae Kalt?) van der Goot, 1915, p. 104.

Siphonophora ulmariae (Schrank) (onobrychis Boyer) (pisi Kalt.) (gei Koch). Ferrari, 1872, p. 55.

MESPILUS.

M. germanica.

Aphis pomi DeGeer. Lingelsheim, 1916a. Aphis fitchii Sanderson. Lingelsheim, 1916a.

NUTTALLIA. (Osmaronia).

N. cerasiformis Torr-Gray.

Illinoia osmaroniae Wilson. Wilson, 1912a, p. 153.

PHOTINIA.

P. arbutifolia Lindl.

Rhopalosiphum nervatum Gillette (arbuti Davidson). Essig, 1917, p. 330.

P. serrulata Lindl. (Crataegus glabra).

Myzus cerasi Fab. Macchiati, 1883, p. 234.

PHYSOCARPUS. (Neillia) (Opulaster). Nine-bark.

P. opulifolius (L). Maxim. (Neillia opulifolius).
Aphis neilliae Oestlund. Oestlund, 1887, p. 59.

POTENTILLA. (Tormentilla). Cinquefoil.

P. Anserina L. Silver Weed.

Aphis dianthi Schrank. Walker, 1850a, p. 394.

Macrosiphum potentillae (Aphis Walker). Theobald, 1913, p. 150.

Myzus rosarum (Walker) (potentillae Oestlund). Oestlund, 1887,
p. 73.

Nectarophora potentillae Oestlund, Oestlund, 1887, p. 83.

Phorodon galeopsidis (Kalt.) Pass. (Walker ex parte). Passerini, 1863, p. 19.

P. arguta Pursh.

Myzus potentillae Williams. Williams, 1910 (1911), p. 66.

P. hippiana Lehm. (pulcherrima).

Nectarophora martini Cockerell. Cockerell, 1903a, p. 171. (pulcherrima?).

P. reptans L.

Phorodon galeopsidis Kalt. Macchiati, 1883, p. 232.

P. tormentilla Scop.

Aphis tormentillae Pass. Del Guercio, 1909, (1910), Redia VII, p. 297.

PRUNUS. (Amygdalus) (Cerasus) (Padus) (Persica). Plum. Cherry.

P. americana Marsh. Wild Plum.

Aphis cerasi Schrank. (A. prunicola Kalt.) Lingelsheim, 1916a. Mysus persicae Sulzer. Gillette and Taylor, 1908, p. 36.

P. Amygdalus Baill. (Amygdalus communis L.) Almond.

Aphis amygdali Blanch. Thomas, 1879, p. 102.

Aphis amygdalinus Schouteden. Schouteden, 1905a, p. 164.

Lachnus fuliginosus Buckton. Buckton, 1891, p. 41.

Rhopalosiphum nympheae (Linn.). Davidson, 1917a, p. 350.

P. armeniaca L. Apricot.

Aphis persicariae Hartig. Hartig, 1841, p. 370.

Aphis pruni Reaum. (prunifoliae Fitch?) (Prunifex Amyot) (Calamaphis Amyot). Buckton, 2, p. 65.

Aphis prunorum Dobrowljansky. Dobrowljansky, 1913, p. 45.

Hyalopterus arundinis Fabr. Clarke, 1903, p. 249.

Hyalopterus pruni (Fab.) Koch (Prunifex Amyot). Buckton, 2, p. 111.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 36. Rhopalosiphum nympheae (Linn.). Davidson, 1917a, p. 350.

P. avium L. Sweet Cherry. Mazzard.

Aphis cerasina Walker. Kaltenbach. 1874, p. 177. Myzus cerasi (Fab.) Pass. Passerini, 1863, p. 22.

P. cerasus L. (Cerasus vulgaris). Sour or Morello Cherry.

Myzus cerasi Fab. Gillette and Taylor, 1908, p. 43.

Myzus cerasi (Fab.) Pass. (Cerasaphis Amyot). Buckton, 1, p. 175.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 36.

P. chamaerasus Jacq.

Aphis insititiae Koch. Cholodkovsky, 1910, p. 146.

P. domestica L. Common Garden Plum.

Aphis alamedensis Clarke. Clarke, 1903, p. 251.

Aphis convecta Walker, Walker, 1849c, p. 37.

Aphis deposita Walker. Walker, 1848c, p. 2250.

Aphis detracta Walker, Walker, 1849c, p. 38.

Aphis egressa Walker. Walker, 1849c, p. 38.

Aphis humuli Schrank. (A. pruni Scop.) Koch, p. 115.

Aphis internata Walker. Walker, 1849c, p. 37.

Aphis persorbens Walker. Walker, 1849c, p. 37.

Aphis pruni Fab. Kaltenbach, 1874, p. 176.

Aphis pruni Koch. (Aphis cardui Linn.) Dobrowljansky, 1913, p. 45.

Aphis prunicola Kalt. Passerini Flora.

Aphis prunina Walker. Passerini, 1863, p. 37; Walker, 1848c, p. 2250.

Aphis setariae Thomas. Quaintance and Baker, 1917, p. 19.

Aphis similis Walker. Walker, 1848c, p. 2249.

Aphis transposita Walker. Walker, 1849c, p. 37.

Aphis sp. Quaintance and Baker, 1917, p. 19.

Myzus persicae Sulzer. Gillette and Taylor, 1917, p. 36.

P. insititia L. Bullace Plum.

Anuraphis prunicola Kaltenbach. Del Guercio, 1909 (1910), p. 297.

Aphis insititia Koch. Kaltenbach, 1874, p. 177.

Brachycaudus helichrysi Kalt. (myosotidis Koch) (pruni Koch). van der Goot, 1915, p. 257.

Phorodon humuli Schrank. (A. pruni Scop.). van der Goot, 1915, p. 134.

P. Mahaleb L. Perfumed Cherry.

Aphis frangulae Kalt. (A. rhammi Kalt. not Boyer). Koch, p. 120.

Myzus cerasi Fab. (Aphis). Ferrari, 1872, p. 61.

Myzus mahaleb (Koch) Pass. (A. pruni mahaleb Boyer) (A. humuli Walker partim?).

Phorodon pruni "n. sp?" Ferrari. (A. humuli Koch partim). Ferrari, 1872, p. 60.

P. melanocarpa.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 36.

P. mume.

Macrosiphum mumecola Matsumura. Matsumura, 1917a, p. 361.

P. padus L.

Aphis padi Reaum. Buckton, 2, p. 62.

Aphis padi L. Kaltenbach, 1874, p. 176.

Aphis padi Kalt. (A. avenae Fab. Kalt.). Mordwilko, 1897, p. 282.

Lachnus padi Hartig. Hartig, 1841, p. 368.

Siphonaphis padi Linn. (A. avenae Fab.). van der Goot, 1915, p. 244.

P. pennsylvanica L. Wild Red, Bird, Fire or Pin Cherry.

Aphis cerasifoliae Fitch. Gillette, 1910, p. 405.

P. persica (L.) Stokes. (Persica vulgaris) (Amygdalus persica). Peach.

Abura momocola Matsumura. Matsumura, 1917a, p. 363.

Aphis amygdali Boyer. (persicae Boyer). Buckton, 2, p. 105.

Aphis amygdalinus Schouteden. Theobald, 1909, p. 324.

Aphis persicae Koch. (persicae Boyer? persicae Kalt?). Koch, pp. 61 and 62.

Aphis infuscata Koch. van der Goot, 1915, p. 205.

Aphis persicae Kalt. Kaltenbach, 1843, p. 93.

Aphis persicae Boyer. (insititiae Koch). Ferrari, 1872, p. 73.

Aphis persicae-niger Smith. Gillette and Taylor, 1908, p. 37.

Aphis persicariae Hartig. Hartig, 1841, p. 370.

Aphis persicophila Rondani. Passerini, 1860, p. 36.

Aphis pruni Reaum. (prunifoliae Fitch?) (prunifex Amyot) (Calamaphis Amyot). Buckton, 2, p. 65.

Aphis prunicola Kalt. (cerasi Schrank). Ferrari, 1872, p. 74.

Aphis scotti Sanderson. Smith, 1905, p. 99.

Aphis setariae Thom. Quaintance and Baker, 1917, p. 19.

Brachycaudus amygdali Buckton. (A. persicae Fonsc.) (cerasi Schrank) (prunicola Kalt.). van der Goot, 1915, p. 253.

Dryobius amygdali van der Goot. van der Goot, 1912, p. 282.

Hyalopterus pruni (Fab.) Koch. (Prunifex Amyot). Buckton, 2, p. 111.

Lachnus fuliginosus Buckton. Buckton, 1891, p. 41.

Lachnus (Pterochloris) persicae Chol. Cholodkovsky, 1908, p. 688.

Myzus momonis Matsumura. Matsumura, 1917a, p. 362.

Myzus (Aphis) persicae Pass. Kaltenbach, 1874, p. 151.

Myzus persicae Pass. Passerini, 1863, p. 25.

Myzus persicae (Sulzer). (insititia Koch) (persicaecola Boisduval) (persicophila Rondani). Buckton, 1, p. 180.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 36.

Myzus varians Davidson. Essig, 1917a, p. 335.

Rhopalosiphum dianthi (Schrank) Koch (persicae Puceron du pecher Morren) (rapae Curtis) (A. floris rapae Curtis) (dubia? Curtis) (vastator Smee) (persicaecola Boisduval) (R. persicae Pass.) Buckton, 2, p. 17.

Rhopalosiphum nympheae (Linn.) Davidson, 1917a, p. 350.

Rhopalosiphum persicae (Sulzer) Pass. (A. dianthi Schrank) (A. vulgaris Kyber) (A. rapae Curtis) (A. dubia Curtis) (A. vastator Smee). Passerini, 1863, p. 21.

P. pseudo-cerasus.

Myzus sasaki Matsumura, Matsumura, 1917a, p. 362.

P. sachalinensis.

Myzus sakurae Matsumura. Matsumura, 1917a, p. 362.

P. serotina Ehrh. (Cerasus serotina) Wild Black or Plum Cherry.

Aphis cerasicolens Fitch. Williams, 1891, p. 7.

Siphocoryne avenae (Fab.) (mali Fitch) (prunifoliae Fitch) (avenae Fitch) (annuae Oestlund) (fitchii Sanderson) (Siphonophora avenae Thos. in part). Pergande, 1904a, p. 8.

P. spinosa L.

Aphis amygdali Boyer. (persicae Boyer). Buckton, 2, p. 105.

Aphis bellula Walker. Walker, 1849c, p. 36.

Aphis cerasina Walker. Kaltenbach, 1874, p. 177.

Aphis consona Walker. Walker, 1849c, p. 36.

Aphis conviva Walker. Walker, 1849c, p. 36.

Aphis humuli Schrank. (A. pruni Scop.). Koch, p. 115.

Aphis impacta Walker. Walker, 1849c, p. 35.

Aphis infuscata Koch. Koch, p. 77.

Aphis nociva Walker. Walker, 1849c, p. 36.

Aphis persicae Boyer. Passerini Flora.

Aphis prunaria Walker. Walker, 1850b, p. 121.

Aphis prunicola Kalt. (A. cerasi Schrank), Passerini, 1863, p. 50.

Aphis prunina Walker. Walker, 1850b, p. 150. Aphis spinarum Hartig. Hartig, 1841, p. 370.

Aphis transmutata Walker. Walker, 1849c, p. 37.

Brachycaudus amygdali Buckton. (A. persicae Fonsc.) (A. cerasi Schrank) (A. prunicola Kalt.), van der Goot, 1915, p. 253.

Hyalopterus pruni (Fab.) Koch. (Prunifex Amyot). Buckton, 2, p. 111.

Phorodon humuli (Schrank) Pass. (pruni Scop.) (Humulifex Amyot) Buckton, 1, p. 167.

Phorodon humuli var. mahaleb Boyer. (A. pruni Boyer) (A. mahaleb Koch) (M. mahaleb Pass.) Buckton, 1, p. 169.

Schizoneura corni Kalt. (S. vagans Koch) "auf Schlehenhecken," Koch, pp. 269 and 330. (September migration).

P. virginiana L. (Cerasus serotina). Choke cherry.

Aphis cerasicolens Fitch. Hunter, 1901, p. 95.

Aphis cerasifoliae Fitch. (Myzus cerasifoliae Thomas). Thomas, 1879, p. 93.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 36.

Siphocoryne avenae (Fab.) (mali Fitch) (prunifoliae Fitch) (avenae Fitch) (annuae Oestl.) (fitchii Sanderson) (Siphonophora avenae Thos. in part). Pergande, 1904a, p. 8.

P. sp.

Aphis padi Linn. (avenae of European authors). Baker, 1917h. Aphis prunicolens Ashmead. Hunter, 1901, p. 102.

Aphis prunifoliae Fitch (avenae of American authors, not padi) Baker, 1917h.

Aphis pruni-mahaleb Boyer. Lichtenstein Flore Supplement.

Aphis setariae Thomas. Gillette and Taylor, 1908, p. 41.

Chaitophorus populi (Linn.). Pass. (Myzaegirus Amyot) (Arctaphis populi Walker). Buckton, 2, p. 142.

Hyalopterus arundinis (Fab.) (A. pruni Fab.) (A. phragmitidicola Oestlund) (A. prunifoliae Fitch?). Hunter, 1901, p. 92.

Hyalopterus arundinis (Fab.) (pruni). Gillette and Taylor, 1908, p. 39.

Myzus mahaleb Fonsc. Pergande, 1897, Bul. 7, Div. Ent.

Myzus prunifoliae Fitch. Sanborn, 1904, p. 70.

Nectarophora prunicola Ashmead. Hunter, 1901, p. 116.

Phorodon humuli Schrank. Gillette and Taylor, 1908, p. 40.

Rhopalosiphum dubium Curtis. Lichtenstein La Flore.

Rhopalosiphum persicae Sulzer. Lichtenstein La Flore.

Rhopalosiphum persicaecola Boisduval. Lichtenstein La Flore.

Rhopalosiphum vastator Smee. Lichtenstein La Flore.

Rhopalosiphum vulgaris Kyber. Lichtenstein La Flore.

PYRUS. (Cydonia) (Malus) (Mespilus) (Sorbus).

P. americana (Marsh) D. C. (Sorbus americana) American Mountain Ash.

Aphis mali Fab. (A. malifoliae Fitch) Oestlund, 1887, p. 64. Schizoneura lanigera Hausmann (S. americana in part of authors) Patch, 1912a, p. 395.

P. aucuparia (L.) Ehrh. European Mountain Ash. Rowan Tree. Aphis aucupariae Buckton. Buckton, 2, p. 76.

Aphis pomi DeGeer. (mali Fab.) (aucupariae Buckton) (crataegi Buckton). van der Goot, 1915, p. 213.

Aphis pomi DeGeer. (mali Fabricius non Oestlund etc.) (oxyacanthae Schrank non Koch) (padi Sanderson non Linnaeus) (pyri Kittel non Boyer, Koch). Theobald, 1916a, p. 176.

Aphis sorbi Kalt. Kaltenbach, 1874, p. 216.

Siphocoryne padi L. (A. avenae Fab.) van der Goot, 1915, p. 244.

P. communis L. (pyraster). Pear.

Aphanostigma (Phylloxera) piri (Chol.) C. B. Borner, 1909b, p. 61. Cholodkovsky, 1910, p. 149.

Aphis crataegi Kalt. (pyri Koch). Passerini, 1863, p. 35.

Aphis crataegi Kaltenbach non Buckton. Theobald, 1916, p. 212.

Aphis gossypii Glover. (citrifolii Ashmead in part) (citrulli Ashmead) (cucumeris Forbes) (forbesi Weed?) Pergande, 1895, p. 314.

Aphis kochii Schouteden (pyri Koch non Boyer) (sorbi Walker, Sanderson etc. non Kaltenbach) (mali Buckton part, non Fabricus) (pyri-mali Fabricius part) (malifoliae Fitch and Thomas) (mali Ferrari part) (pyri Gillette and Taylor). Theobald, 1916b, p. 205.

Aphis lentiginis Buckton. Buckton, 2, p. 60.

Aphis mali Fab. (Puceron du pomier Gotze) (pomi DeGeer). Buckton, 2, p. 46.

Aphis oxyacanthae Koch non Schrank. Bayer, 1909b, p. 35.

Aphis pyri Koch. Bayer, 1909b, p. 35.

Aphis pomi DeGeer. (mali Fab.) (aucupariae Buckton) (cratae-gi Buckton). van der Goot, 1915, p. 210.

Aphis pomi DeGeer. (mali Fabricius) (pyri Kittel non Boyer, Koch) (padi Sanderson non Linnaeus) (oxyacanthae Schrank). Theobald, 1916a, p. 176.

Aphis pyraria Pass. Buckton, 2, p. 54.

Aphis pyrastri Boisduval. Passerini Flora.

Aphis pyri Goureau. Passerini Flora.

Aphis rumicis L. (evonymi Fab.) (papaveris Fab.) (atriplicis Fab.) (genistae Scopoli). van der Goot, 1915, p. 225.

Eriosoma lanuginosa Hartig. (pyri Goethe) Baker and Davidson, 1917c, p. 66.

Eriosoma pyricola Baker and Davidson. Baker and Davidson, 1916e, p. 351.

Lachnus pyri Buckton. Buckton, 1899a, p. 274.

Myzoxylus laniger (Hausmann). Bayer, 1909b, p. 34.

Myzus oxyacanthae (Koch) Pass. Passerini, 1863, p. 24.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 36.

Myzus pyrarius Pass. Passerini, 1862, p. 2.

Myzus pyrinus Ferrari. Zoological Record, 1872, p. 418.

Nectarophora tabaci Pergande. Pergande, 1898, p. 300.

Prociphilus corrugatans Sirrine. Quaintance and Baker, 1917, p. 19.

Prociphilus fitchii Baker and Davidson. (pyri Fitch). Baker and Davidson, 1917c, p. 66.

Schizoneura piri Mordwilko. Cholodkovsky, 1910, p. 148.

Siphocorync avenae (Fab.) (mali Fitch) (avenae Fitch) (prunifoliae Fitch) (annuae Oestl.) (fitchii Sanderson) (Siphonophora avenae Thomas in part). Pergande, 1904a, p. 8.

P. (Malus) coronaria L. American Crab.

Aphis gossypii Glover. Gillette, 1910, p. 404.

P. Cydonia L. (Cydonia vulgaris). Quince-tree.

Aphis brevis Sanderson. Sanderson, 1901b, p. 157.

Aphis crataegifoliae Fitch. Quaintance and Baker, 1917, p. 18.

Aphis cydoniac Boisduval. Zoological Record, 1868, p. 416.

Aphis mali Fab. (A. pomi DeGeer) (A. oxyacanthae Schrank). Passerini, 1863, p. 40.

Aphis pomi DeGeer. (mali Fab.) (aucupariae Buckton) (crataegi Buckton) van der Goot, 1915, p. 210.

Macrosiphum solani (Kalt.) Del Guercio 1909 (1910), Redia VII, p. 297.

Prociphilus corrugatans Sirrine. Quaintance and Baker, 1917, p. 19

Siphocorync avenac (Fab.) (mali Fitch) (prunifoliae Fitch) (avenae Fitch) (annuae Oestl.) (fitchii Sanderson) (Siphonophora avenae Thos. in part). Pergande, 1904a, p. 8.

Siphonophora (Aphis) solani Kalt. Passerini, 1863, p. 13.

P. germanica Hook. (Mespilus germanica).

Aphis assidua Walker. Walker, 1849c, p. 40.

Aphis inserta Walker. Walker, 1849c, p. 39.

Aphis insita Walker No. 1. Walker, 1849c, p. 39.

Aphis mactata Walker. Walker, 1849c, p. 39.
Aphis nutricata Walker. Walker, 1849c, p. 39.

Aphis pomi DeGeer. (mali Fabricius non Oestlund) (oxyacanthae Schrank non Koch) (padi Sanderson non Linnaeus) (pyri Kittel non Boyer, Koch etc.). Theobald, 1916a, p. 176.

Aphis pruni Reaum. (prunifoliae Fitch?) (Prunifex Amyot) (Calamaphis Amyot). Buckton, 2, p. 65.

Macrosiphum pclargonii Buckton. Theobald, 1913, p. 54.

Ovatus (Myzus) mespili van der Goot. van der Goot, 1915, p. 138. Siphonaphis padi L. (avenae Fab.) van der Goot, 1915, p. 244.

Siphonophora pelargonii (Kalt.) Koch (pallida Walker) (fragariae Walker?) (diplanteriae Koch?) (malvae Pass.) Buckton, 1, p. 137.

P. japonica Thunb. (Cydonia japonica).

Aphis mali Fab. (A. pomi DeGeer) (A. oxyacanthae Schrank). Passerini, 1863, p. 40.

P. malus L. (paradisiaca). Apple.

Aphis (Siphocorync) avenac Fab. Gillette and Taylor, 1908, p. 30.

Aphis bakeri Cowen (cephalicola Cowen). Gillette and Taylor, 1908, p. 28.

Aphis bivincta Fitch (var. of mali). Fitch, 1855, p. 760.

Aphis brevis Sanderson, Sanderson, 1901b, p. 157. ("Accidental?").

Aphis erataegi Kalt. (pyri Koch). Passerini, 1863, p. 35. Lustner 1911.

Aphis erataegi Kaltenbach. (non Buckton). Theobald, 1916a, p. 171.

Aphis deveeta Walker, Walker, 1849c, p. 38.

Aphis fulviventris Fitch. (var. of mali). Fitch, 1855, p. 760.

Aphis immaeulata Fitch (var. of mali). Fitch, 1855, p. 760.

Aphis kochi Schouteden. (pyri Koch non Boyer) (pyri-mali Fabricius part) (mali Buckton part) (sorbi Walker part Sanderson, Theobald, non Kaltenbach) (Myzus mali Ferrari part) (malifoliae Fitch). Theobald, 1916a, p. 170.

Aphis lanata Salisbury. Hagen, 1863, p. 103.

Aphis mali Fab. (A. pyri Reaum.) Thomas, 1878, p. 11.

Aphis mali Fab. (A. pomi DeGeer) (A. oxyacanthae Schrank). Passerini, 1863, p. 40.

Aphis mali Fab. (Puceron du pomier Gotze) (pomi DeGeer). Buckton, 2, p. 46.

Aphis mali Fab. (A. malifoliae Fitch). Oestlund, 1887, p. 64.

Aphis malifoliae Fitch (the sorbi Kalt. of American authors). Baker and Turner, 1916f, p. 11.

Aphis medieaginis Koch. Gillette and Taylor, 1908, p. 32.

Aphis nigra Theobald. (oxyacanthae Koch non Schrank). Theobald, 1916a, p. 171.

Aphis nigrieollis Fitch (var. of mali). Fitch, 1855, p. 760.

Aphis nigriventris Fitch (var. of mali). Fitch, 1855, p. 760.

Aphis obsoleta Fitch (var. of mali). Fitch, 1855, p. 760.

Aphis pallidieornis' (var. of mali). Fitch, 1855, p. 759.

Aphis pomi DeGeer. Gillette and Taylor, 1908, p. 23.

Aphis pomi DeGeer, (mali Fab.) (aucupariae Buckton) (crataegi Buckton). van der Goot, 1915, p. 213.

Aphis pomi DeGeer (mali Fabricius) (pyri Kittel non Boyer, Koch) (padi Sanderson, non Linnaeus) (oxyacanthae Schrank). Theobald, 1916a, p. 170.

Aphis pruni Reaum. (prunifoliae Fitch?) (Prunifex Amyot) (Calamaphis Amyot) Buckton, 2, p. 65.

Aphis pyri Boyer (sorbi Sanderson) (malifolii Fitch). Gillette and Taylor, 1908, p. 32.

Aphis pyri Boyer (crataegi Kalt.) (A. discrepans Koch). Koch, p. 109.

Aphis pyri Hartig. Hartig, 1841, p. 369.

Aphis rumicis Linnaeus (papaveris Fabricius) (thlaspeos Schrank) (fabae Scopoli) (atriplicis Fabricius) (aparines Schrank) (ar-

mata Hausmann) (dahliae Mosley) (evonymi Fabricius) (ulicis Fabricius). Theobald, 1916a, p. 171.

Aphis sorbi Kalt. Gillette, 1910, p. 404.

Aphis tergata Fitch (var. of mali). Fitch, 1855, p. 760.

Aphis thoracica Fitch (var. of mali). Fitch, 1855, p. 760.

Aphis triscriata Fitch (var. of mali). Fitch, 1855, p. 760.

Callipterus mucidus Fitch. Hunter, 1901, p. 90. Fitch, 1859, p. 334. "A solitary plant-louse."

Hyalopterus pruni Fab. Del Guercio, 1909 (1910), Redia VII, p. 297.

Macrosiphum solanifolii Ashmead. Patch, 1915e, p. 214.

Myzus mali Ferrari. Zoological Record, 1872, p. 418.

Myzus oxyacanthae (Koch) Pass. Passerini, 1863, p. 24. Theobald, 1911-12.

Mysus persicae Sulzer. Gillette and Taylor, 1908, p. 32.

Nectarophora tabaci Pergande. Pergande, 1898, p. 300.

Pemphigus americanus Walker.

Phorodon humuli Schrank-Koch. Theobald, 1916a, p. 171.

Schizoneura lanigera (Hausm.) Hartig (A. mali Tougard) (Myzoxylus mali Blot.) Passerini, 1863, p. 69.

Schizoneura lanigera Hausmann. (S. americana Riley in part, of authors). Patch, 1916b.

Schizoneura pyri (Fitch). Hunter, 1901, p. 82.

Siphocoryne avenae (Fab.) (mali Fitch) (prunifoliae Fitch) (avenae Fitch) (annuae Oestl.) (fitchii Sanderson) (Siphonophora avenae Thomas, in part). Pergande, 1904a, p. 8.

Siphocoryne avenae Fabricius (avenae sativae Schrank) (annuae Oestlund) (mali Fitch non Fabricius) (fitchii Sanderson) (crataegifoliae Fitch) Theobald, 1916a, p. 171.

Siphonaphis padi L. (A. avenae Fab.) van der Goot, 1915, p. 244.

P. sinensis.

Aphis pomi DeGeer. Matsumura, 1917a, p. 357.

Nippolachnus piri Matsumura. Matsumura, 1917a, p. 355.

Toxoptera piricola Matsumura, Matsumura, 1917a, p. 363.

P. sitchensis.

Schizoneura lanigera Hausmann. (S. americana in part, of authors). Patch, 1912a, p. 395.

P. torminalis Ehrh. (tormentalis Buck.).

Aphis aucupariae Buckton. Buckton, 2, p. 76.

Aphis sorbi Kalt. Buckton, 2, p. 59. Bayer, 1914a, p. 142.

P. sp.

Aphis cratacgi Kalt. (pyri Boyer). Kaltenbach, 1874, p. 202. Aphis kochi Schouteden. (pyri Koch nez Boyer). Schouteden, 1906a, p. 221.

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Aphis pyri Boyer (not pyri Koch). Buckton, 2, p. 98.

ROSA. Rose.

R. californica Schlecht.

Macrosiphum rosae (Linn.) Essig, 1917a, p. 329. Myzus rosarum Walker. Davidson, 1910, p. 379.

R. canina L. Dog Rose.

Capitophorus tetrarhodus Walker. (Siphonophora rosarum Koch). van der Goot, 1915, p. 131.

Lachnus rosae Cholodkovsky. Cholodkovsky (in Russian).

Macrosiphum dirhodum (Walker). van der Goot, 1915, p. 63.

Myzaphis rosarum Kalt. (not Lichtenstein nor Buckton). van der Goot, 1915, p. 188.

Scmiaphis trirhodus Walker. (Hyalopterus aquilegiae Koch). van der Goot, 1915, p. 273.

Siphonophora rosae (Reaumur) Koch. Buckton, 1, p. 109. Siphonophora rosae var. glauca Buckton. Buckton, 1, p. 109.

Siphonophora rosae (Koch) (Aphis rosae L. auct.) (A. dipsaci Schrank). Passerini, 1863, p. 11.

Siphonophora rosarum (Walker) Koch. Buckton, 1, p. 151.

R. centifolia L.

Aphis dirhoda Walker. Walker, 1849a, p. 43.

Aphis rosae Linn. (A. dipsaci Schrank) (Puceron du Rosier Gotz.) Kaltenbach, 1843, p. 4.

Aphis rosarum Kalt. Kaltenbach, 1874, p. 224.

Hyalopterus delineatus Buckton. Buckton, 2, p. 113.

Siphonophora glauca Buckton. Buckton, 1, p. 109.

Siphonophora rosae (Reaumur) Koch. Buckton, 1, p. 109.

R. cinnamomea L. Cinnamon Rose.

Hyalopterus aquilegiae-flavus (Kittel) (Aphis) (flavus Schouteden) (aquilegiae Koch) (trirhoda Walker). Hayhurst, 1909a, p. 108.

R. Eglanteria L.

Aphis dirhoda Walker. Walker, 1849a, p. 43.

R. gallica L.

Aphis rosarum Kalt. Kaltenbach, 1874, p. 224.

Hyalopterus aquilegiae-flavus (Kittel) (Aphis) (flavus Schouteden) (aquilegiae Koch) (trirhoda Walker). Hayhurst, 1909a, p. 112.

Hyalopterus delineatus Buckton. Buckton, 2, p. 113.

Myzus tetrarhoda (Walker) Pass. (S. rosarum Koch). Passerini, 1863, p. 25.

Siphonophora rosaecola Passerini. Passerini Flora.

R. indica L.

Hyalopterus aquilegiae-flavus (Kittel) (Aphis) (flavus Schoute-teden) (aquilegiae Koch) (trirhoda Walker). Hayhurst, 1909a, p. 112.

Myzus tetrarhoda (Walker) Pass. (S. rosarum Koch). Passer-ini, 1863, p. 25.

R. multiflora.

Macrosiphum ibarae Matsumura. Matsumura, 1917a, p. 360.

R. rubiginosa L.

Siphonophora rosae Koch. (Aphis rosae L. auct.) (A. dipsaci Schrank). Passerini, 1863, p. 11.

Siphonobhora rosarum (Walk.) Koch. Buckton, 1. p. 151.

R. sempervirens L.

Hyalopterus trirhoda Walker. Macchiati, 1883, p. 237. Myzus tetrarhoda Walker. Macchiati, 1883, p. 236.

R. sp.

Aphis (Adactynus) diplepha Rafinesque. Rafinesque, 1818. Aphis (Adactynus) rhodryas Rafinesque. Rafinesque, 1818.

Aphis (Adactynus) rosa-suaveolens Rafinesque, Rafinesque, 1818. Hyadaphis flavus Kittel (aquilegiae Koch) (trirhodus Walker) Schouteden, 1906a, p. 230.

Hyalopterus trirhoda (Walker) Pass. (H. aquilegiae Koch) Buckton, 2, p. 115.

Lachnus maculatus Lichtenstein. Lichtenstein La Flore.

Lachnus rosae Cholodkovsky. Patch, 1917a, p. 418.

Lachnus rosae Cholodkovsky, (maculatus Licht?) (rosarum van der Goot). van der Goot, 1915a, p. 409.

Macrosiphum rosae Reaumur. (A. dipsaci Schrank) (S. rosae Koch) (S. scabiosae Buckton). van der Goot, 1915, p. 90. Macrosiphum solanifolii Ashmead. Patch, 1915e, p. 214.

Myzus rosarum (Walker) (potentillae Oestl.) Oestlund, 1887, p. 7.3

Mysus roseus Macchiati. Lichtenstein La Flore.

Nectarophora pallida Oestlund. Oestlund, 1887, p. 84.

Rhopalosiphum nervatum Gillette. Gillette, 1908a, p. 63.

Siphonophora rosae var. floridae Ashmead. Ashmead, 1882, p. 88. Siphonophora rosae Reaumur. Theobald, 1911, p. 16.

Siphonophora ulmariae Schrank. (onobrychis Boyer) (pisi Kalt.) (gei Koch). Ferrari, 1872, p. 55.

RUBUS. Bramble.

R. cassius L.

Aphis rubi Kalt. Kaltenbach, 1874, p. 239.

Aphis urticae Fab. (urticaria Kalt.) Passerini, 1863, p. 37.

R. corylifolius Sm. Fl. Brit.

Aphis rubi Kalt. Kaltenbach, 1843, p. 24.

R. dalmaticus D. C.

Hyalopterus trirhoda Walker. Macchiati, 1883, p. 237.

R. discolor.

Aphis rubi Kalt. Kaltenbach, 1874, p. 239,

R. fruticosus L.

Aphis urticae Fab. (urticaria Kalt.) Ferrari, 1872, p. 65. Aphis urticaria Kalt. Buckton, 2, p. 51. Macrosiphum chelidonii Kaltenbach? Theobald, 1913, p. 54.

Siphonophora cyparissiae Koch. Buckton, 1, p. 114.

Siphonophora rubi (Kalt.) Koch. Buckton, 1, p. 141.

R. idaeus L. (aculeatissimus. Wild Red Raspberry) (strigosus Michx).
Raspberry.

Aphis idaei van der Goot. van der Goot, 1915, p. 204.

Aphis rubicola Oestlund. Oestlund, 1887, p. 60.

Aphis urticae Fab. Passerini, 1874, p. 2.

Aphis urticaria Kalt. Buckton, 2, p. 51.

Macrosiphum rubicola (Oestlund). Oestlund, 1887, p. 78.

Siphonophora chelidonii (Kalt.) Koch. Buckton, 1, p. 122.

Siphonophora funesta Macchiati. Zoological Record, 1885, p. 240. Siphonophora rubi (Kalt.). Koch. Buckton, 1, p. 141.

R. nutkanus Moc.

Amphorophora rubicola (Oestlund). Davidson, 1914, Jour. Ec. Ent. Vol. 7, p. 136.

R. occidentalis L. Black Raspberry. Thimbleberry.

Amphorophora rubi (Kalt.) Gillette, 1911a, p. 381.

Aphis sp. Sanborn, 1904, p. 62.

Pemphigus rubi Thomas. "Accidental visitant?" Thomas, 1879, p. 148.

R. parviflorus Nutt. Thimbleberry.

Nectarosiphum rubicola (Oestlund). Essig, 1917a, p. 328.

R. saxatilis L.

Nectarosiphum rubi (Kaltenbach). Bayer, 1914a, p. 133.

R. villosus Ait. Dewberry.

Nectarophora rubi (Kalt.). Hunter, 1901, p. 116. Sipha rubifolii Thomas. Sanborn, 1904, p. 44. ("Undescribed genus?" Davis, 1909b, p. 157.).

R. vitifolius C. & S. Wild Blackberry.

Amphorophora rubi (Kalt.) Essig, 1917a, p. 330.

SANGUISORBA. Burnet.

S. sp.

Aphis sanguisorbae Schrank. Kaltenbach, 1874, p. 245.

SPIRAEA.

S. prunifolia Sieb.

Aphis spiraeella Schouteden. Gillette, 1910, p. 404.

S. salicifolia Linn. Meadow-sweet.

Aphis spiracae Oestlund. Oestlund, 1887, p. 68.

Aphis spiracela Schouteden. Essig, 1911a, p. 463.

Macrosiphum ulmariae (Schrank). Bayer, 1914a, p. 135.

S. Thunbergi.

Aphis kogomecola Matsumura. Matsumura, 1917a, p. 357.

S. ulmaria. See Filipendula.

S. sp.

Acyrthosiphon ignotum Mordwilko. Mordwilko, 1914, Faune de la Russie, p. 147.

Acyrthosiphon soldatovi Mordwilko. Mordwilko, 1914, Faune de la Russie, p. 168.

Aphis pisi Kalt. (ulmariae Schrank). Kaltenbach, 1874, p. 242.

Aphis n. sp. Kalt. Kaltenbach, 1874, p. 243.

Macrosiphum cholodkovsky Mordwilko. Zoological Record, 1909,

Macrosiphum cholodkovsky Mordwilko. Zoological Record, 1909, p. 404.

Macrosiphum portschinskyi Mordwilko. Zoological Record, 1909, p. 404.

ULMARIA.

U. ulmaria. See Filipendula.

LEGUMINOSAE. PULSE FAMILY.

ANAGYRIS.

A. sp.

Aphis craccivora Koch. Lichtenstein La Flore.

ASTRAGALUS. Milk Vetch.

A. bisulcatus Hook.

Aphis medicaginis Koch. Cowen, 1895, p. 120.

A. leucopis Torr. Loco Weed.

Aphis medicaginis Koch. Essig, 1912, Host Index II, p. 826.

A. sp.

Rhopalosiphum persicae Sulzer. Matsumura, 1917a, p. 362.

CARAGANA.

C. arborescens Lam.

Acyrthosiphon caraganae (Cholodkovsky) (pisi Bogdanov) (ulmariae part, Cholodkovsky). Mordwilko, 1914, Faune da la Russie, p. 152.

Aphis medicaginis Koch. Hunter, 1901, p. 101.

C. pymaea D. C.

Acyrthosiphon caraganae (Cholodkovsky) Mordwilko, 1914, Faune de la Russie, p. 153.

CERATONIA.

C. sp.

Aphis ceratoniae Licht. (ined.). Lichtenstein La Flore.

CERCIS. Redbud.

C. canadensis L. Redbud.

Lachnus longistigma Monell. Sanborn, 1904, p. 31.

COLUTEA.

C. arborescens L.

Aphis pisi Kalt. Kaltenbach, 1874, p. 134.

Pemphigus coluteae Pass. Passerini, 1863, p. 75.

Siphonophora ulmariae (Schrank and Walker) (onobrychis Boyer)

(pisi Kalt.) (pisi Koch) (gei Koch). Passerini, 1863, p. 13.

CORONILLA.

C. pusilla.

Aphis coronillae Ferrari. Ferrari, 1872, p. 69.

CYTISUS. Broom.

- C. laburnum. See Laburnum vulgare.
- C. nigricans L.

Aphis laburni Kalt. Passerini Flora.

C. scoparius (L.) Link. Sarothamnus scoparius L. (Spartum scoparius). Scotch Broom.

Aphis genistae Kaltenbach. Theobald, 1911-12.

Aphis laburni Kalt. (genistae Boyer). Passerini, 1863, p. 45.

Aphis pisi Kalt. Kaltenbach, 1874, p. 107.

Aphis setosa Kalt. Kaltenbach, 1874, p. 107.

Aphis spartii Koch. Kaltenbach, 1874, p. 108.

Siphonophora menthae Buckton. Buckton, 1, p. 121.

Siphonophora rubi (Kalt.) Koch. Buckton, 1, p. 141.

C. (Sarothamnus).

Schizoneura spartanthi Boisduval. Lichtenstein, Flore Supplement.

Siphonophora ulmariae Pass. Passerini Flora.

DESMODIUM. Tick Trefoil.

D. canadense DC.

Microparsus variabilis Patch. (Macrosiphum n. sp. Sanborn Kans. Aphid. p. 71). Patch, 1909b, p. 337.

D. canescens L.

Siphonophora desmodii Williams. Williams, 1910 (1911), p. 76.

DOLICHOS.

D. monacalis.

Aphis medicaginis Koch. Del Guercio, 1909 (1910), Redia VII, p. 297.

D. sp.

Aphis dolichii Signoret. Lichtenstein, Flore Supplement.

ERVUM. See Vicia.

FABA.

F. vulgaris. See Vicia Faba.

GENISTA. Woad-waxen.

G. anglica L.

Aphis genistae Kalt. Kaltenbach, 1874, p. 113.

Aphis rumicis Linn. Walker, 1850a, p. 19.

G. germanica L.

Aphis genistae Scopoli. Passerini, 1863, p. 47.

G. ovata Waldst.

Aphis craccae Schrank. Ferrari, 1872, p. 71.

G. tinctoria L. Dyer's Greenweed.

Acyrthosiphon genistae Mordwilko. Mordwilko, 1914, Faune de la Russie, p. 144.

Aphis genistae Kalt. Kaltenbach, 1874, p. 113.

Aphis laburni Kalt. Pierre, 1905, p. 160.

Aphis rumicis Linn. Walker, 1850a, p. 19.

G. sp.

Aphis genistae Boyer. Lichtenstein, La Flore.

Aphis rumicis L. (evonymi Fab.) (papaveris Fab.) (atriplicis Fab.) genistae Scopoli. van der Goot, 1915, p. 225.

Siphonophora ulmariae (Schrank, Walker) (onobrychis Boyer) (pisi Kalt.) (pisi Koch) (gei Koch). Passerini, 1863, p. 13.

GLYCINE.

G. hispida.

Aphis glycines Matsumura. Matsumura, 1917a, p. 531.

G. sp.

Macrosiphum solani Kalt. Matsumura, 1917a, p. 361. Rhopalosiphum persicae Sulzer. Matsumura, 1917a, p. 362.

GLYCYRRHIZA. Liquorice.

G. lepidota Nutt. Wild Liquorice.

Aphis mcdicaginis Koch. Gillette and Taylor, 1908, p. 32.

HEDYSARUM.

H. onobrychis. See Onobrychis viciaefolia Scop.

LABURNUM.

L. vulgare Gris. (Cytisus laburnum).

Aphis cytisorum Hartig. Hartig, 1841, p. 370.

Aphis laburni Kalt. Buckton, 2, p. 86. Theobald, 1911-12. van der Goot, 1915, p. 210.

Aphis rumicis Linn. Walker, 1850a, p. 19.

LATHYRUS. Everlasting Pea.

L. angustifolius.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonse?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande) Davis, 1915a, p. 12.

L. hirsutus Linn. (Orobus lathyroides Habl.).

Acyrthosiphon pisi pisi (Kalt.) Mordwilko, 1914, Faune de la Russie, p. 86.

L. latifolius L. Everlasting or Perennial Pea.

Acyrthosiphon pisi pisi (Kalt.) Mordwilko, 1914, Faune de la Russie, p. 85.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande) Davis, 1915a, p. 11.

Siphonophora ulmariae (Schrank, Walker) (onobrychis Boyer) (pisi Kalt.) (pisi Koch) (gei Koch). Passerini, 1863, p. 13. Siphonophora viciae Kalt. Ferrari, 1872, p. 56.

L. odoratus L.

Aphis bakeri Cowen. Patch, 1913, Bul. 207, p. 448.

Aphis dissita Walker, Walker, 1849c, p. 34.

Macrosiphum pisi (Kaltenbach) (Aphis lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (N. trifolii Pergande). Davis, 1915a, p. 11.

L. pratensis L.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmariae Pass, nec Schrank) (N. destructor Johnson). (M. trifolii Pergande). Davis, 1915a, p. 11. Rhopalosiphum viciae (Kaltenbach). van der Goot, 1915, p. 153.

L. sativus. Grass Pea.

Macrosiphum pisi (Kaltenbach) (Aphis lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande). Davis, 1915a, p. 11.

L. sylvestris. Flat Pea.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmariae Pass nec Schrank) (N. destructor Johnson) (M. trifolii Pergande) Davis, 1915a, p. 11.

L. sp.

Acyrthosiphon pisi ussuriensis Mordwilko, Mordwilko, 1914, Faune de la Russie, p. 140.

Megoura viciae Kaltenbach (viciae Buckton). Theobald, 1911-12.

LESPEDEZA.

L. bicolor.

Macrosiphum hagicola Matsumura. Matsumura, 1917a, p. 360.

L. sp.

Macrosiphum solani Kalt. Matsumura, 1917a, p. 361.

LOTUS. Bird's-foot Trefoil.

L. corniculatus L.

Aphis craccae Linn. (A. viciae Fab.). Theobald, 1911-12.

Aphis loti Koch. Del Guercio, 1909 (1910), Redia VII, p. 298.

Aphis loti Kaltenbach. Schouteden, 1906a.

Aphis rumicis Linn. Walker, 1850a, p. 19.

Macrosiphum lathyri Walker? Theobald, 1911-12.

Macrosiphum loti Theobald. Theobald, 1913, Jour, Ec. Biol. Vol. 8, p. 54.

Macrosiphum pisi Kalt. (lathyri Walker) (cyparissiae Koch) (ononis Koch) van der Goot, 1915, p. 85.

L. uliginosus Schkuhr.

Siphonophora pisi (Kalt.) Koch. (ulmariae Schrank) (onobrychis Boyer) (lathyri Walker). Buckton, 1, p. 135.

L. sp.

Siphonophora ulmariae (Schrank, Walker) (onobrychis Boyer) (pisi Kalt.) (pisi Koch) (gei Koch). Passerini, 1863, p. 13.

LUPINUS. Lupine.

L. albifrons.

Macrosiphum albifrons Essig. Essig, 1911b, p. 546.

L. arboreus Sims. Tree Lupine.

Macrosiphum albifrons Essig. Essig, 1917a, p. 328.

L. latifolius Agarth.

Macrosiphum albifrons Essig. Essig, 1917a, p. 328.

MEDICAGO. Medick.

M. denticulata Willd.

? Aphis gossypii Glover. Fullaway, 1909, p. 39. Aphis medicaginis Koch. Davidson, 1909, p. 302.

M. falcata Linn.

Aphis medicaginis Koch. Kaltenbach, 1874, p. 123.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonse?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande) Davis, 1915a, p. 11.

Siphonophora ulmariae Schrank (pisi Kalt.) Mordwilko, 1909, p. 103.

M. lupulina L. Black Medick. Nonesuch.

Siphonophora ulmariae Schrank (A. onobrychis Boyer) (A. pisi Kalt.) (S. pisi Koch) (S. gei Koch. Macchiati, 1883, p. 232.

M. orbicularis All.

Aphis medicaginis Koch. Macchiati, 1883, p. 255.

M. sativa L. Lucerne. Alfalfa.

Acyrthosiphon pisi turanicum Mordwilko. Mordwilko, 1914, Faune de la Russie, p. 139.

Aphis medicaginis Koch. Passerini, 1863, p. 42.

Callipterus trifolii Monell. (Chaitophorus maculatus Buckton) (Aphis ononidis Kalt?) Davis, 1914, U. S. D. A., B. E. Tech. Ser. 25, Pt. II.

Chaitophorus maculatus Buckton. Buckton, 1899b, p. 277.

Macrosiphum creelii Davis. Davis, 1914, Can. Ent. 46, p. 47.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande) Davis, 1915a, p. 11.

Myzocallis ononidis (Kalt.) Pass. (C. ononidis Koch). Passerini, 1863, p. 54.

Pemphigus betae Doane. Parker, 1914, p. 137. Jour. Ec. Ent. Vol. 7.

Siphonophora ulmariae (Schrank, Walker) (onobrychis Boyer) (pisi Kalt.) (pisi Koch) (gei Koch). Passerini, 1863, p. 13.

MELILOTUS. Sweet Clover.

M. alba Lam. White Melilot.

Aphis medicaginis Koch. Hunter, 1901, p. 126.

Macrosiphum pisi (Kaltenbach) (Aphis lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande) Davis, 1915a, p. 11.

M. italica Lam.

Aphis medicaginis Koch. Hunter, 1901, p. 101.

M. pallida Bess. (macrorhiza).

Pemphigus lactucarius Pass. Passerini, 1863, p. 77.

M. sp.

Aphis papaveris Fab. Lichtenstein, Flore Supplement.

MIMOSA.

M. sp.

Aphis mimosae Ferrari. Lichtenstein, La Flore.

ONOBRYCHIS.

O. viciaefolia Scop. (sativa) (Hedysarum Onobrychis).

Aphis pisi Kalt. (A. ulmariae Schrank) (onobrychis Boyer) Kaltenbach, 1874, pp. 118, 137.

Siphonophora ulmariae Pass. (Aphis ulmariae Boyer). Kaltenbach, 1874, p. 777.

ONONIS.

O. diffusa. See O. serrata.

O. hircina Jacq.

Acyrthosiphon pisi pisi (Kalt.) Mordwilko, 1914, Faune de la Russie, p. 85.

Myzocallis ononidis (Kalt.) Pass. (C. ononidis Koch.). Passerini, 1863, p. 54.

O. Natrix L.

Aphis apocyni Koch. Ferrari, 1872, p. 68. Aphis brunnea Ferrari. Ferrari, 1872, p. 70.

O. repens L.

Macrosiphum pisi Kalt. (lathyri Walker) (cyparissiae Koch.) (ononidis Koch.) van der Goot, 1915, p. 84.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande) Davis, 1915a, p. 11.

Myzocallis ononidis Pass. Passerini Flora.

Pergandeida ononidis Schouteden. Schouteden, 1906a, p. 215.

Siphonophora ulmariae Pass. Passerini Flora.

O. serrata Forsk. (diffusa).

Myzocallis ononidis Kalt. (Chaitophorus ononidis Koch). Macchiati, 1883, p. 260.

Siphonophora ononis Koch. Macchiati, 1883, p. 230.

O. spinosa L.

Aphis incumbens Walker. Walker, 1849c, p. 35.

Aphis inducta Walker. Walker, 1849c, p. 35.

Aphis translata Walker. Walker, 1849c, p. 35.

Chaitophorus ononidis Kalt. (Ch. spinulosus Koch in litt.). Koch, p. 5.

Myzocallis ononidis Kalt. (Aphis). Ferrari, 1872, p. 75.

Siphonophora ononis Koch. Koch, p. 175.

Siphonophora ulmariae Pass. Passerini Flora.

O. sp.

Aphis brunnea Macchiati. Zoological Record, 1885, p. 239. Aphis rumicis Linn. Walker, 1850a, p. 19. Therioaphis ononidis (Pass.) Walker. Wilson, 1910, p. 155.

OXYTROPIS. (Aragallus.)

O. lamberti Pursh. (Aragallus lamberti).

Aphis medicaginis Koch. Williams, 1891, p. 20.

PHASEOLUS. Kidney Bean.

P. coccineus L.

Aphis rumicis Linn. Walker, 1850a, p. 19. Tychea phaseoli Pass. Buckton, 4, p. 90.

P. lunatus L.

?Aphis gossypii Glover. Fullaway, 1909, p. 39.

P. multiflorus Willd. Scarlet Runner.

Pemphigus globosus Walker. Walker, 1852, p. 1057. Siphonophora ulmariae Pass. Passerini Flora.

Tychea phaseoli Pass. Passerini Flora.

P. vulgaris L. (nanus).

Aphis gossypii Glover. (citrifolii Ashm. in part) (citrulli Ashm.) (cucumeris Forbes) (forbesi Weed?). Pergande, 1895, p. 314. Aphis papaveris Fab. Del Guercio, 1909 (1910), Redia VII, p. 297. Aphis rumicis Linn. Walker, 1850a, p. 19.

Lachnus longitarsus Ferrari. Zoological Record, 1872, p. 418.

Macrosiphum solanifolii Ashmead. Patch, 1915e, p. 214.

Tullgrenia phaseoli Pass. van der Goot, 1915a, p. 516.

Tychea phaseoli Pass. Hunter, 1901, p. 69.

P. sp.

Aphis pscudobrassicae Davis. Paddock, 1915a, p. 9.

Aphis rumicis (evonymi Fab.) (papaveris Fab.) (atriplicis Fab.) genistae Scopoli). van der Goot, 1915, p. 225.

Siphonophora ulmariae (Schrank, Walker) (onobrychis Boyer) (pisi Kalt.) (pisi Koch) (gei Koch). Passerini, 1863, p. 13.

PISUM.

P. arvense L.

Aphis pisi Kalt. Kaltenbach, 1874, p. 118.

P. sativum L. Garden Pea.

Acyrthosiphon pisi turanicum Mordwilko. Mordwilko, 1914, Faune de la Russie, p. 139.

Aphis crataegifoliae Fitch. Quaintance and Baker, 1917, p. 18. Aphis rumicis Linn. Walker, 1850a, p. 19.

Macrosiphum pisi Kalt. (lathyri Walker) (cyparissiae Koch) (ononis Koch) van der Goot, 1915, p. 86.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande) Davis, 1915a, p. 11. Macrosiphum solanifolii Ashmead. Patch, 1915e, p. 214.

Siphonophora ulmariae (Schrank, Walker) (onobrychis Boyer)
(pisi Kalt.) (pisi Koch). Passerini, 1863, p. 13.

P. sp.

Aphis rumicis L. (evonymi Fab.) (papaveris Fab.) (atriplicis Fab.) genistae Scopoli). van der Goot, 1915, p. 225.

Macrosiphum solani Kalt. Matsumura, 1917a, p. 361.

Myzus pergandii Sanderson. Sanderson, 1901a, p. 73.

ROBINIA. Locust.

R. Pseudo-Acacia L. Common Locust. False Acacia.
 Aphis laburni Kalt. Cholodkovsky, 1910, p. 145.
 Aphis robiniae Macchiati. Del Guercio, 1900, p. 133.
 Callipterus robiniae Gillette. Gillette, 1907a, p. 395.
 Rhopalosiphum dianthi (Schrank). Williams, 1891, p. 7.

R. viscosa Vent. Clammy Locust.

Aphis medicaginis Koch. Hunter, 1901, p. 101.

SAROTHAMNUS. See Cytisus.

SPARTIUM.

S. junceum L.

Siphonophora ulmariae Schrank. (A. onobrychis Boyer) (A. pisi Kalt.) (S. pisi Koch) (S. gei Koch). Macchiati, 1883, p. 232.

S. sp.

Aphis laburni Kalt. Lichtenstein, La Flore.

TEPHROSIA. (Cracca). Hoary Pea.

T. sp.

Aphis rumicis Linn. Walker, 1850a, p. 19. Aphis viciae Kalt. Kaltenbach, 1874, p. 143.

TRIFOLIUM.

T. filiforme.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande) Davis, 1915a, p. 11.

T. hybridum. Alsike Clover.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonse?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande). Davis, 1915a, p. 12.

T. incarnatum L. Crimson or Italian Clover.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonse?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande) Davis, 1915a, p. 11.

Nectarophora pisi Kalt. (ulmariae Schrank) (onobrychis Boyer) (lathyri Mosley) (gei Koch) (viciae Curtis not Fab.) (destructor Johnson). Sanderson, 1900, p. 171.

T. medium perenne. Mammoth Clover.

Callipterus trifolii Monell. (Chaitophorus maculatus Buckton) (Aphis ononidis Kalt?) Davis, 1914, U. S. D. A. Bur. Ent., Ser. 25, Pt. II.

T. pratense L. Red Clover.

Aphis bakeri Cowen. Davis, 1908, p. 259.

Aphis gossypii Glover (citrifolii Ashm. in part) (citrulli Ashm.) (cucumeris Forbes) (forbesi Weed?) Pergande, 1895, p. 314. Aphis pisi Kalt. Kaltenbach, 1874, p. 118.

Callipterus trifolii Monell. (Chaitophorus maculatus Buckton) (Aphis ononidis Kalt?). Davis, 1914, U. S. D. A. Bur. Ent. Tech. Ser. 25. Pt. II.

Macrosiphum cercalis (Kalt.) Pergande, 1904a, p. 20.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonse?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande). Davis, 1915a, p. 11.

Macrosiphum pisi Kalt. (lathyri Walker) (cyparissiae Koch) (ononis Koch). van der Goot, 1915, p. 86.

Myzocallis trifolii (Monell). Gillette, 1910, p. 369. (genevii Sanborn). Baker, 1917f, p. 424.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 35.

T. procumbens L. Low Hop Clover.

Macrosiphum trifolii Theobald. Theobald, 1913, Jour. Ec. Biol. Vol. 8, p. 55.

Myzocallis ononidis (Kalt.) Pass. (C. ononidis Koch). Passerini, 1863, p. 54.

T. repens L. White Clover

Aphis cephalicola Cowen. Cowen, 1895, p. 118.

Aphis trifolii Oestlund. Oestlund, 1887, p. 55.

Callipterus trifolii Monell. (Chaitophorus maculatus Buckton) (Aphis ononidis Kalt?) Davis, 1914, U. S. D. A. Bur. Ent., Tech. Ser. 25, Pt. II. Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmicariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande). Davis, 1915a, p. 11. Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 35.

T. sp.

Aphis bakeri Cowen. Patch, 1915b, p. 433.

Aphis brevis Sanderson. Patch, 1915b, p. 431.

Aphis cratacgifoliae Fitch. Quaintance and Baker, 1917, p. 18. Aphis rumicis L. (evonymi Fab.) (papaveris Fab.) (genistae Scopoli). van der Goot, 1915, p. 225.

Aphis scaliae Del Guercio. Del Guercio, 1914.

Geoica squamosa Hart. Hart, 1891 and 1892, p. 99.

Rizoberlesia trifolii Del Guercio. Del Guercio, 1914.

ULEX. Furze.

U. europaeus L.

Aphis rumicis Linn. Walker, 1850a, p. 19.

U. sp.

Aphis papaveris Fab. Lichtenstein, Flore Supplement.

Aphis rumicis Linn. (fabae Kirby) (genistae Scop.) (ulicis Fab?) (euphorbiae Kalt?) (dahliae Mosley) (Cinara rumicis Mosley) (Rumicifex Amyot) (Genistifex Amyot). Buckton, 2, p. 84.

VICIA. Ervum. Vetch. Tare.

V. amoena.

Acyrthosiphon pisi pisi (Kalt.) Mordwilko, 1914, Faune de la Russie, p. 86.

V. cracca L.

Aphis craccae Linn. Kaltenbach, 1874, p. 144.

Aphis craccae Schrank. (A. viciae craccae L.). Passerini, 1863, p. 46.

Aphis craccivora Koch. Kaltenbach, 1874, p. 144.

Aphis rumicis Linn. Thomas, 1879, p. 88.

Aphis viciae Kalt. Kaltenbach, 1874, p. 143.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonse?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande) Davis, 1915a, p. 12.

V. Faba L. (Faba vulgaris).

Aphis papaveris Fab. (thlaspeos Schrank) (aparines) (fabae Scopoli). Ferrari, 1872, p. 71.

Aphis rumicis Linn. Walker, 1850a, p. 19.

Aphis viciac Kalt. Kaltenbach, 1874, p. 143.

V. gigantea Hook.

Macrosiphum pisi (Kaltenbach) (A. onobrychis B. de Fonsc?) (A. lathyri Mosley) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande). Davis, 1915a, p. 11.

V. ludoviciana Nutt.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. uimariae Pass, nec Schrank) (N. destructor Johnson) (M. trifolii Pergande). Davis, 1915a, p. 11.

V. narbonensis L.

Aphis medicaginis Koch. Passerini, 1863, p. 42.

V. pseudo-cracca Bert.

Aphis craccae Schrank. Macch'ati, 1883, p. 249.

V. pulchella H. B.

Aphis atronitens Cockerell. Cockerell, 1903b, p. 115. "Vicia aff. pulchella."

V. sativa L. (angustifolia). Spring Vetch.

Aphis craccae L. Kaltenbach, 1874, p. 144.

Aphis papaveris Fab. (fabae Scop.) (aparines Schrank). Passerini, 1863, p. 46.

Aphis viciae Kalt. Kaltenbach, 1874, p. 143.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande). Davis, 1915a, p. 12.

V. sepium L.

Aphis tribulis Walker, Walker, 1849c, p. 34.
Aphis viciae Kalt. Kaltenbach, 1874, p. 143.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonsc?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande) Davis, 1915a, p. 12.

V. villosa Roth...Hairy or Winter Vetch.

Macrosiphum pisi (Kaltenbach) (A. lathyri Mosley) (A. onobrychis B. de Fonse?) (S. ulmariae Pass. nec Schrank) (N. destructor Johnson) (M. trifolii Pergande). Davis, 1915a, p. 11.

V. sp.

Aphis rumicis L. (evonymi Fab.) (papaveris Fab.) (atriplicis Fab.) (genistae Scopoli). van der Goot, 1915, p. 225.

Mysus persicae Sulzer. Gillette and Taylor, 1908, p. 36.

VIGNA.

V. catjang Walpers.

Aphis medicaginis Koch. Essig, 1917a, p. 340.

V. sinensis.

Melanoxanthus sinensis Matsumura. Matsumura, 1917a, p. 359.

LEGUMINOSAE.

L. sp.

Acyrthosiphon dubium Mordwilko. Mordwilko, 1914, Faune de la Russie, p. 180. "in quadam Papilionacearum."

LINACEAE, FLAX FAMILY.

LINUM. Flax.

L. sp.

Pemphigus betae Doane. Parker, 1914, p. 137. Jour. Ec. Ent., Vol. 7.

OXALIDACEAE. WOOD SORREL FAMILY.

OXALIS. Wood Sorrel.

O. corniculata L. Lady's Sorrel.

Aphis oxalis Macchiati. Macchiati, 1883, p. 256.

O. stricta L.

Aphis maidi-radicis Forbes. Davis, 1909b, p.124.

O. sp.

Aphis maidis Fitch. Davis, 1909b, p. 145. Rhopalosiphum dianthi (Schrank). Williams, 1891, p. 19.

GERANIACEAE. GERANIUM FAMILY.

ERODIUM. Storksbill.

E. Botrys Bert.

Siphonophora malvae Mosley. (A. pelargonii Kalt.) (A. pallida Walker) (S. pelargonii Koch) (S. diplantherae Koch). Macchiati, 1883, p. 230.

E. cicutarium L'Herit. ex Ait.

Aphis rumicis Linn. Walker, 1850a, p. 19.

GERANIUM. Cranesbill.

G. maculatum L. Wild Cranesbill.

Nectarophora geranii Oestlund, Oestlund, 1887, p. 81.

G. molle L.

Aphis geranii Kalt. Kaltenbach, 1874, pp. 81-82.

Siphonophora malvae (Mosley) Pass, (A. pelargonii Kalt.) (A. pallidaWalker) (S. pelargonii Koch) (S. diplantherae Koch). Passerini, 1863, p. 14.

G. pusillum Burm.

Aphis geranii Kalt. Kaltenbach, 1874, p. 81.

G. Robertianum L. Herb Robert.

Aphis dianthi Schrank. Walker, 1850a, p. 394.

Aphis urticae Schrank. Kaltenbach, 1874, p. 81.

Siphonophora pelargonii Kalt. Koch, pp. 193, 194.

Siphonophora urticae (Kalt.). Koch. Buckton, 1, p. 144.

G. sp.

Siphonophora circumflexa Buckton. Theobald, 1911, p. 17. Siphonophora pelargonii (Kalt.) Koch. (pallida Walker) (fragaria Walker?) (diplanterae Koch?) (malvae Pass.) Buckton, 1, p. 137.

PELARGONIUM.

P. sp.

Aphis extranea Walker. Walker, 1849c, p. 2251.

Myzus ribis Linn. et auct. (Aphis) Ferrari, 1872, p. 62.

Myzus targionii Del Guercio. (Myzus ribis? Linn. Ferrari). Del Guercio. 1900. p. 152.

Siphonophora malvae (Mosley) Pass. (A. pelargonii Kalt.) (A. pallida Walker) (S. pelargonii Koch) (S. diplantherae Koch). Passerini, 1863, p. 14.

TROPAEOLUM.

T. majus L.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 35.

T. tricolorum Sweet. (tricolor).

Aphis dianthi Schrank. Walker, 1850a, p. 122.

T. sp.

Aphis rumicis L. (evonymi Fab.) (papaveris Fab.) (atriplicis Fab.) (genistae Scopoli. van der Goot, 1915, p. 225.

RUTACEAE. RUE FAMILY.

CITRUS.

C. Aurantium L. (vulgaris). Orange.

Aphis citri Ashmead. Essig, 1909, p. 49.

Aphis gossypii Glover. (citrifolii Ashmead, in part) (citrulli Ashmead) (cucumeris Forbes) (forbesi Weed?) Pergande, 1895, p. 314. Essig, 1911c, p. 590.

Aphis tavaresi Del Guercio. Tavares, 1908, pp. 142-144.

Mysus asclepiadis Pass. Ferrari, 1872, p. 62.

Myzus citricidus Kirkaldy. Fullaway, 1909, p. 28.

Mysus persicae (Sulzer). Essig, 1911c, p. 600.

Siphonophora citrifolii Ashmead. Ashmead, 1882, p. 91. Essig, 1911c, p. 592.

Toxoptera aurantii Boyer. (Aphis) (Aphis camelliae Kalt.) (Ceylonia theaecola Buckton). Phillips and Davis, 1912, p. 8.

Toxoptera aurantii Koch. Buckton, 3, p. 135. Essig, 1911c, p. 601.

C. Medica L. (limonum) (limetta).

Aphis tavaresi Del Guercio.

Myzus persicae (Sulzer). Essig, 1911c, p. 600.

Toxoptera aurantii Boyer. (Aphis) (A. camelliae Kalt.). Ferrari, 1872, p. 62.

C. sp.

Aphis citricola van der Goot. van der Goot, 1912, "Uber einige wahrscheinlich neue Blattlausarten," p. 275.

Aphis cookii Essig. (gossypii Essig 1910a). Essig, 1911c, p. 587.

Aphis dianthi Schrank. Walker, 1850a, p. 394.

Aphis medicaginis Koch. Essig, 1917a, p. 340.

MELICOPE. (Pelea).

M. sp.

Toxoptera aurantiae Koch. Fullaway, 1909, p. 32.

RUTA. Rue.

R. graveolens L. Common Rue.

Siphonophora jaceae Linn. Ferrari, 1872, p. 58. Theobald, 1913, p. 54.

SIMARUBACEAE. QUASSIA FAMILY.

AILANTHUS. Tree of Heaven.

A. glandulosa L.

Aphis mali Fab. (A. pomi DeGeer) (A. oxyacanthae Schrank). Macchiati, 1883, p. 255.

A. sp.

Aphis mali Macchiati. Lichtenstein, Flore Supplement.

POLYGALACEAE. MILKWORT FAMILY.

POLYGALA. Milkwort.

P. Senega L. Seneca Snakeroot

Aphis (Adactynus) polygala-senega Raf. Rafinesque, 1818.

EUPHORBIACEAE. SPURGE FAMILY.

AND

BUXACEAE. BOX FAMILY.

ACALYPHA. Three-seeded Mercury.

A. virginica L.

Aphis gossypii Glover. (citrifolii Ashm. in part) (citrulli Ashm.) (cucumeris Forbes) (forbesi Weed?) Pergande, 1895, p. 314.

BUXUS.

B. sempervirens L.

Aphis papaveris var. buxi Del Guercio. Del Guercio, 1909 (1910) p. 297. Redia VII.

Aphis rumicis L. (evonymi Fab.) (papaveris Fab.) (atriplicis Fab.) (genistae Scopoli). van der Goot, 1915, p. 225.

EUPHORBIA. Spurge.

E. biglandulosa Desf.

Aphis euphorbiae Kalt. Macchiati, 1883, p. 239.

E. corollata L. Flowering Spurge.

Aphis euphorbia Kalt. Williams, 1891, p. 18.

E. Cyparissias L. Cypress Spurge.

Aphis euphorbiae Kalt. Passerini, 1863, p. 47. Siphonophora cyparissiae Koch. Buckton, 1, p. 114.

E. Esula L.

Aphis euphorbiae Kalt. Passerini, 1863, p. 47.

E. gerardiana Facq.

Acyrthosiphon eyparissiac propiuquum Mordwilko, Mordwilko, 1914, Faune de la Russie, p. 193.

E. hirsuta (Torr.) Wiegand. (Euphorbia hypericifolia).

Siphonophora cuphorbicola Thomas. Williams, 1891, p. 24.

E. lathyris L. Caper Spurge. Mole Cricket.

Tychea phascoli Pass. Karsch, 1886, p. 1.

E. maculata L. Milk Purslane.

Siphonophora cuphorbiac Thomas. Thomas, 1879, p. 57.

E. marginata Pursh. Snow-on-the-Mountain.
Siphonophora euphorbiae Thomas. Thomas, 1879, p. 57.

E. Paralias L.

Aphis rumicis Linn. Walker, 1850a, p. 18.

E. Peplus L. Petty Spurge.

Acyrthosiphon eyparissiae cyparissiae (Koch). Mordwilko, 1914, Faune de la Russie, p. 192.

Aphis dianthi Schrank. Walker, 1850a, p. 394. Aphis cuphorbia Kalt. Macchiati, 1883, p. 239.

E. Terracina L.

Aphis cuphorbiae Kalt. Macchiati, 1883, p. 239.

E. sp.

Aphis asclepiadis Fitch. Oestlund, 1887, p. 60. Aphis cyparissiac Koch. Kaltenbach, 1874, p. 525. Forda occidentalis Hart. Davis, 1910b, p. 408. Tyehea brevicoruis Hart. Davis, 1910b, p. 408.

RICINUS. Castor-oil Plant.

R. communis L.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 35.

CALLITRICHACEAE. WATER STARWORT FAMILY.

CALLITRICHE. Water Starwort.

C. stagnalis Scop.

Rhopalosiphum nymphaeae Koch. Passerini, Flora.

ANACARDIACEAE. CASHEW FAMILY.

PISTACIA.

P. atlantica Desf.

Pemphigus riccobonii Stefani. Stefani, 1899, p. 1.

P. Lentiscus L.

Aphis (?) pistaciac Linn. Kaltenbach, 1843, p. 140. Aploneura leutisci Pass. Ferrari, 1872, p. 84.

P. Terebinthus L.

Aphis therebinthinae Virey. Hagen, p. 440.

Pemphigus cornicularius Pass. Lichtenstein, 1880a.

Pemphigus cornicularius Pass. (A. pistaciae L. auct. partim). Passerini, 1863, p. 72.

Pemphigus corniculoides Licht. Lichtenstein, 1880a.

Pemphigus derbesi Licht. (P. pallidus Derbes). Buckton, 3, p. 128.

Pemphigus follicularius Pass. Lichtenstein, 1880a.

Pemphigus folliculoides Licht. Lichtenstein, 1880a.

Pemphigus pallidoides Licht. Lichtenstein, 1880a.

Pemphigus retroflexus Courchet. Lichtenstein, 1880a.

Pemphigus semilunarius Pass. Lichtenstein, 1880a.

Pemphigus semilunoides Licht. Lichtenstein, 1880a.

Pemphigus utricularius Pass. Lichtenstein, 1880a.

Pemphigus utriculoides Licht. Lichtenstein, 1880a.

P. vera L.

Pemphigus coccus Buckton, 1889, p. 141.

P. sp.

Ceratopemphigus zehntneri Schouteden. Schouteden, 1905, p. 188. "on undetermined shrub, possibly a Pistacia."

Pemphigus edificator Buckton. Buckton, 1893, p. 71. "found on what was thought to be a variety of Pistacia terebinthae."

Pemphigus minus Derbes. Zoological Record, 1869, p. 501.

RHUS.

R. diversiloba T. and G.

Rholaposiphum rhois Monell (howardii Wilson?). Essig, 1917a, p. 334.

R. glabra L. Smooth Sumach

Pemphigus rhois (Fitch). Jackson, 1908, p. 203. Rholaposiphum rhois Monell. Sanborn, 1904, p. 65.

R. semilata Murray.

Melaphis (Schlechtendalia) chinensis (Bell). Baker, 1917j, p. 385

R. trilobata.

Rholaposiphum rhois Monell. Gillette and Bragg, 1915, Jour. Ec. Ent. p. 100.

R. typhina L. Staghorn Sumach.

Pemphigus rhois (Fitch). Jackson, 1908, p. 203.

R. vernicifera.

Arimakia araliae Matsumura. Matsumura, 1917a, p. 363.

R. sp.

Pemphigus cornicularius Pass. (pistaciae L. and Boyer). Kaltenbach, 1874, p. 96.

Pemphigus semilunarius Pass. Kaltenbach, 1874, p. 96.

Pemphigus utricularius Pass. Kaltenbach, 1874, p. 96.

Schlechtendalia sinensis Doubleday. Lichtenstein, La Flore.

Tetraneura (Aploneura) lentisci Pass. Kaltenbach, 1874, p. 97.

CYRILLACEAE. CYRILLA FAMILY.

CYRILLA.

C. racemiflora L.

Pergandeida nigra Wilson, Wilson, 1911, p. 63.

AQUIFOLIACEAE. HOLLY FAMILY.

ILEX. Holly.

I. Aquifolium L.

Aphis ilicis Kalt. Kaltenbach, 1843, p. 88.

Aphis rumicis (evonymi Fab.) (papaveris Fab.) (atriplicis Fab.) (genistae Scopoli). van der Goot, 1915, p. 225.

L. sp.

Aphis ilicicola Boisduval. Zoological Record, 1868, p. 416.

Aphis ilicis Kaltenbach. Theobald, 1911-12.

Aphis rumicis Linn. (fabae Kirby) (genistae Scop.) (ulicis Fab?) (euphorbiae Kalt?) (dahliae Mosley) (Cinara rumicis Mosley) (Rumicifex Amyot) (Genistifex Amyot). Buckton, 2, p. 84.

CELASTRACEAE. STAFF TREE FAMILY.

CELASTRUS. Staff Tree.

C. articulatus Thunb.

Aphis celastrii Matsumura. Matsumura, 1917a, p. 356.

C. scandens L. Waxwork. Climbing Bitter-sweet.

Nectarophora sp. Lintner, 1894, p. 512.

EVONYMUS. (Evonymus). Spindle Tree.

E. atropurpureus Jacq. (Waahoo). Burning Bush.

Aphis cuonymi Fab. Weed, 1893, p. 298.

Aphis rumicis L. Thomas, 1879, p. 88.

Aphis rumicis L? (euonymi Fab.). Hayhurst, 1909b, p. 98.

Aphis sp. Sanborn, 1904, p. 58.

E. bungeana.

Aphis evonymi Fab. Lingelsheim, 1916a.

E. Europaeus L. European Spindle Tree.

Aphis euonymi Fab. Buckton, 2, p. 72.

E. Maaki.

Aphis rumicis Linn. (?aquilegiae nigra Kittel) (atriplicis Fabricius) (armata Hausmann) (aparines Schrank) (dahliae Mosley) (evonymi Fabricius) (papaveris Fabricius) (?solani Kittel) (thlaspeos Schrank). Schouteden, 1906a, p. 227.

E. verrucosa.

Aphis evonymi Fab. Lingelsheim, 1916a.

STAPHYLEACEAE. BLADDER NUT FAMILY.

STAPHYLEA. Bladder Nut.

S. pinnata L.

Amphorophora ampullata Buckton. (Rhopalosiphum staphyleae Koch?) Buckton, 1, p. 187.

Rhopalosiphum staphyleae Koch. Koch, p. 33. van der Goot, 1915, p. 151.

ACERACEAE. MAPLE FAMILY.

ACER. (Negundo.) Maple.

A. campestris L.

Chaitophorinella lyropicta Kessler. van der Goot, 1915a, p. 373. Chaitophorus aceris (Linn.) Koch. (Puzeron de l'Erable Reaum.) Bu.kton, 2, p. 126. Passerini, 1863, p. 59.

Chaitophorus granulatus Koch. Buckton, 2, p. 140.

Drepanosiphum accrinum Walker. (aceris Koch). van der Goot, 1915, p. 282.

Drepanosiphum (Aphis) platanoides Schrank. van der Goot, 1915a, p. 285.

Lachnus longirostris Fab? Passerini, 1860, p. 38.

Lachnus longirostris Fab. Kaltenbach, 1874, p. 92.

Lachnus longirostris Pass. Kaltenbach, 1874, p. 562.

Phyllophora testudinacea Fernie, Fernie, 1852, p. 265.

Siphonophora (Drepanosiphum) aceris Koch. Ferrari, 1872, p. 53. Stomaphis macroryncha Cholodkovsky. Mordwilko, 1899, p. 411.

A. circinnatum Pursh.

Chaitophorus americanus Baker. Baker, 1917f, p. 428. Chaitophorus sp. (not negundinis and not aceris). Gillette, 1909a, p. 388.

A. japonicum.

Chaitophorus accris L. Matsumura, 1917a, p. 354.

A. miyabei.

Chaitophorus aceris L. Matsumura, 1917a. p. 354.

A. Negundo (Moench) Koehne. (Negundo aceroides) (Rulac negundo).

Box Elder.

Chaitophorus negundinis Thomas. Bragg, 1907, p. 431. Gillette, 1909a, p. 387.

Drcpanosiphum braggii Gillette. Gillette, 1907a, p. 393.

Macrosiphum n. sp. Sanborn. Sanborn, 1904, p. 73.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 35.

A. palmatum.

Chaitophorus aceris L. Matsumura, 1917a, p. 354. Siphocoryne acericola Matsumura. Matsumura, 1917a, p. 359.

A. pennsylvanicum L. Striped Maple. Moosewood. Chaitopherus accris (Linn.) Hunter, 1901, p. 86.

A. platanoides L. Norway Maple.

Chaithophorinella lyropieta Kessler. van der Goot, 1915a, p. 373.

Chaitophorus aceris (Fab.) Koch. Passerini, 1863, p. 59.

Chaitophorus aceris (Linn.) Koch (Puceron de l'Erable Reaum.). Buckton, 2, p. 126.

Chaitophorus ecraeinus Koch. Koch, p. 2.

Chaitophorus lyropieta Kessler (aceris of most American authors) Baker, 1917f, p. 428.

Drepanaphis accrifolii (Thomas). Essig, 1917a, p. 322.

Drepanosiphum platanoides Schrank (Siphonophora platanoides Pass.) van der Goot, 1915, p. 283.

A. Pseudo-Platanus L.

Aphis aecricola Walker. Kaltenbach, 1874, p. 91.

Aphis accrina Walker. Kaltenbach, 1874, p. 91.

Aphis platanoides Schrank. Kaltenbach, 1874, p. 91.

Chaithophorinella aceris Koch. (Aphis aceris Linn. pr. p.). van der Goot, 1915a, p. 371.

Chaitophorus coracinus Koch. Schouteden, 1906a, p. 213.

Drepanosiphum acerina (Walker). (D. aceris Koch). Buckton, 1, p. 186.

Drepanosiphum platanoides (Schrank) Koch. Buckton, 1, p. 183. Mysus graeilis Buckton. Buckton, 1, p. 177.

Phyllophora testudinacea Fernie. Fernie, 1852, p. 265.

Siphonophera aceris Koch. (S. aceris Ferrari). Macchiati, 1883.

A. saccharinum L. Acer dasycarpum Ehrh. (eriocarpum). White or Silver Maple.

Drepanosiphum (Siphonephera) aeerifeliae Thomas. Thomas, 1879, p. 47.

Lachnus longistigma Monell. Sanborn, 1904, p. 31.

Longistigma (Lachnus) earyae (Harris). Wilson, 1909c, p. 385.

Melano.vanthus salieti Harris. Williams, 1891, p. 17.

Pemphigus aceris Monell. Hunter. 1901, p. 77.

Pemphigus stamineus Haldeman. Hunter, 1901, p. 79.

Pemphigus tessellata (accrifolii Riley). Patch, 1908, p. 484.

A. saccharum Marsh. Sugar or Rock Maple.

Chaitophorus americanus Baker. Paker, 1917f, p. 429.

Drepanaphis? minutus Davis. Davis. 1910a, p. 195.

Pemphigus aceris Monell. Williams, 1891, p. 17.

A. sp.

Aphis perforata Signoret. Lichtenstein, La Flore.

Aphis platanoides Hartig. Hartig, 1841, p. 369.

Aphis villosus Hartig. Hartig, 1841, p. 369.

Chaithophorinella testudinata Thornton. (Aphis aceris Linn. pr. p.) (Chaitophorus a eris Koch pr. p.) (Periphyllus testudo Thornton). van der Goot, 1915, p. 377.

Chaitopherus accris L. (Chelymorpha phyllophora Clark). Kirkaldy, 1905, p. 417.

Chaitophorus lyropictus Kessler. Mordwilko, 1899, p. 414.

Chaitophorus testudinatus (Thorn.). Oestlund, 1908, p. 131.

Chaitophorus versicolor Koch. Theobald, 1911-12.

Drepanosiphum platanoides Schrank. Wilson, 1909b, p. 349.

Euceraphis betulae (Koch). (Aphis cerasicolens Fitch?). Baker, 1917f, p. 425.

Pemphigus aceris Monell. Jackson, 1908, p. 214.

Periphyllus testudo van der Hoeven. Zoological Record, 1870, p. 472.

Stomaphis graffii Chol. Cholodkovsky, 1894 (1895), p. 405. "Auf ahornwurzeln."

RULAC.

R. negundo. See Acer negundo L.

SAPINDACEAE. SOAPBERRY FAMILY.

AESCULUS. Horse-chestnut.

A. glabra Willd. Fetid or Ohio Buckeye.

Drepanaphis monelli (Davis). Gillette, 1910, p. 371. Phymatosiphum monelli Davis. Davis, 1909c, p. 197.

A. parviflora Walt.

Chaitophorus aceris (Linn.) Koch. Buckton, 2, p. 126.

MELIANTHUS.

M. major (L).

Rhopalosiphum persicae (Sulzer). Essig, 1917a, p. 332.

BALSAMINACEAE. TOUCH-ME-NOT FAMILY.

IMPATIENS. Balsam.

I. biflora Walt. (fulva). Spotted Touch-me-not.

Aphis impatientis Thomas, 1879, p. 98.

Nectarophora fulvae Oestlund. Oestlund, 1887, p. 80.

Siphonophora carnosa var. impatientis Williams. Williams, 1910 (1911), p. 74.

I. noli-tangere L.

Aphis balsamines Kalt. Kaltenbach, 1874, p. 84.

I. pallida Nutt. (aurea Muhl.) Pale Touch-me-not.

Aphis impatientis Thomas. Williams, 1891, p. 25. Siphonophora carnosa var. impatientis Williams, 1910

(1911), p. 74. Siphonophora fulvae Oestlund. Williams, 1891, p. 25.

RHAMNACEAE. BUCKTHORN FAMILY.

CEANOTHUS. Red-root.

C. cuneatus Nutt.

Aphis ceanothi Clarke. Davidson, 1909, p. 302.

C. hirsutus Nutt.

Aphis ceanothi-hirsuti Essig. Essig, 1911b.

C. integerrimus Hook.

Aphis ecanothi Clarke, Clarke, 1903, p. 251.

C. thrysiflorus Esch.

Aphis ceanothi Clarke. (A. ceanothi-hirsuti Essig). Essig, 1917a, p. 338.

NOLTEA.

N. africana Reichb. Soapbush.

Aphis ceanothi Clarke. (A. ceanothi-hirsuti Essig). Essig, 1917a, p. 338.

PALIURUS.

P. sp.

Aphis paliuri Licht. (ined.) Lichtenstein, La Flore.

RHAMNUS. Buckthorn.

R. Alaternus L.

Aphis frangulae Koch. (rhamni Kalt.) Macchiati, 1883, p. 240. Myzus rhamni Koyer. Macchiati, 1883, p. 236. Toxoptera alaterna Del Guercio. Phillips and Davis, 1912, p. 8. Toxoptera variegata Del Guercio. Phillips and Davis, 1912, p. 8.

R. alpina L.

Aphis frangulae Kalt. (rhamni Kalt.). Kaltenbach, 1874, p. 101.

R. californica Esch. Coffee Berry.

Nectarophora rhamni Clarke. Clarke, 1903, p. 254.

R. Frangula L.

Aphis frangulae Kalt. (rhamni Kalt.). Kaltenbach, 1874, p. 101. Koch. pp. 120, 142.

Aphis frangulae Koch. (rhamni Kalt.). Macchiati, 1883, p. 240.

R. lanceolata Pursh.

Aphis frangulae Kalt. Williams, 1891, p. 7.

R. Purshiana. Cascara sagrada.

Aphis gossypii Glover. Essig, 1917a, p. 338.

Myzus rhamni Boyer. (Macrosiphum rhamni Clarke). Wilson, 1912a, p. 156.

R. sp.

Aphis rhamni Schrank. Lichtenstein, La Flore. Myzus rhamni Boyer. Lichtenstein, La Flore.

ZIZYPHUS.

Z. Jujuba Lam.

Rhizobius jujubae Buckton. Buckton, 1899b, p. 278. Kirkaldy, 1906, p. 16. "is a Coccid."

VITACEAE. VINE FAMILY.

AMPELOPSIS.

A. quinquefolia. See Psedera.

PARTHENOCISSA.

P. quinquefolia. See Psedera.

PSEDERA. Virginia Creeper. Woodbine.

P. quinquefolia (L.) Greene. (Ampelopsis quinquefolia) (Parthenocissa quinquefolia).

Aphis folsomii Davis. (parthenocissa Williams). Davis, 1911, p. 17.

Aphis setariae Thomas. Gillette and Taylor, 1908, p. 42.

VITIS. Grape.

V. californica Benth.

Phylloxera pemphigoides Donnadieu. Rathay, 1889, p. 67.

V. cordifolia Michx. Frost or Chicken Grape.

Aphis ripariae Oestlund. Williams, 1891, p. 12.

Phylloxera vastairix Planchon. Williams, 1891, p. 12.

Siphonophora viticola Thomas. Williams, 1891, p. 12.

V. vinifera L.

Aphis vitis Scopoli. Kaltenbach, 1874, p. 95.

Hyalopterus pruni (Fab.) Koch (Prunifex Amyot). Buckton, 2, p. 111.

Hyalopterus pruni (Fab.) Koch (Walker partim). Passerini, 1863, p. 27.

Peritymbia (Phylloxera) vitifolii (Fitch-Riley) (vastatrix Planchon). Borner, 1909b, p. 61.

Phylloxera vastatrix Planchon. Kaltenbach, 1874, p. 775.

Rhizoctonus ampelinus Mokrzecky. Mordwilko, 1909, p. 159. Mokrzecky, 1895-96 (1897), p. 438.

Schizoneura ampelorhiza Del Guercio. Del Guercio, 1900, p. 104.

V. vulpina L. (riparia Michx.). River-bank or Frost Grape.

Aphis ripariae Oestlund. Oestlund, 1887, p. 63.

Phylloxera pemphigoides Donnadieu. Rathay, 1889, p. 66.

V. sp.

Aphis ripariae Oestlund? (?vitis Scopoli). Gillette, 1910, p. 404. Aphis vitis Scopoli. Sanborn, 1904, p. 56.

Macrosiphum illinoiensis (Shimer) (Aphis) (viticola Thomas). Davis, 1910, Jour. Ec. Ent., p. 486. Phylloxera vastatrix Planch. (Peritymbia vitisana Westwood). Lichtenstein, La Flore.

Xerampelus vastator Del Guercio. (Rhizaphis vastatrix Planchon). Del Guercio, 1909, p. 80.

TILIACEAE. LINDEN FAMILY.

TILIA. Linden.

T. americana L. Basswood.

Eucallipterus tiliae (Linn.). Gillette, 1910, p. 367.

Longistigma caryae (Harris) Wilson (Lachnus longistigma Monell). (L. platanicola Riley). Wilson, 1909a, p. 385.

Macrosiphum tiliae (Monell). Davis, 1914, Can. Ent. Vol. 46, p. 83.

Pterocallis tiliae (Linn.). Pass. Buckton, 3, p. 36.

T. grandifolia.

Drepanosiphum tiliae Koch. Koch, p. 204.

Pterocallis tiliae (Linn.) Pass. Buckton, 3, p. 36.

T. Europea L.

Pterocallis tiliae Auct. (Aphis) Kalt. Ferrari, 1872, p. 77. Schizoneura reaumuri Kalt. Kaltenbach, 1843, p. 176.

T. platyphyllos Scop.

Drepanosiphum (Aphis) tiliae Koch. Kaltenbach, 1874, pp. 79, 561. Pterocallis tiliae (Linn.) Pass. Buckton, 3, p. 36.

T. rubra D. C.

Aphis adducta Walker. Walker, 1849c, p. 34. Pterocallis tiliae (Linn.) Pass. Buckton, 3, p. 36.

T. tomentosa Moench. Silver Linden.

Eucallipterus tiliae (Linn.). Essig, 1917a, p. 323.

T. sp.

Callipterus (Eucallipterus) tiliac (Linn.). Davis, 1909a, p. 33. Pachypappa reaumuri Kaltenbach. Theobald, 1915a. "on lime." Siphonophora tiliac Monell. (Drepanosiphum tiliac Koch?). Thomas, 1879, p. 188.

MALVACEAE. MALLOW FAMILY.

ALTHAEA. Marsh Mallow.

A. narbonnensis Pourr.

Aphis malvae Koch. Passerini, 1863, p. 36.

Siphonophora malvae (Mosley) Pass. (A. pelargonii Kalt.) (A. pallida Walker) (S. pelargonii Koch) (S. diplantherae Koch). Passerini, 1863, p. 14.

A. officinalis L. Marsh Mallow.

Aphis malvae Kech. Passerini, 1863, p. 36. Aphis urticaria Kalt. Kaltenbach, 1874, p. 70. Siphonophora artemisiae Bover. Siphonophora kochii Ferrari. (S. artemisiae Koch, p. 165). Del Guercio, 1900, p. 168.

A. rosea Cav. Hollyhock.

Aphis malvae Koch. Passerini, 1863, p. 36.

Macrosiphum solanifolii (Ashmead). Houser, 1917a, p. 69.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 36.

Siphonophora malvae (Mosley) Pass. (A. pelargonii Kalt.) (A. pallida Walker) (S. diplantherae Koch). Passerini, 1863, p. 14.

A. sp.

Aphis cucumeris Forbes. Williams, 1891, p. 15.

GOSSYPIUM.

G. herbaceum L. Cotton.

Acyrthosiphon gossypii gossypii Mordwilko. Mordwilko, 1914,

Faune de la Russie, p. 173.

Aphis gossypii Glover. (citrifolii Ashmead, in part) (citrulli Ashmead) (cucumeris Forbes) (forbesi Weed?). Pergande, 1895, p. 314.

Myzus persicae Sulzer. Glilette and Taylor, 1908, p. 35.

G. sp.

Acyrthosiphon gossypii gossypii Mordwilko. Mordwilko, 1914, Faune de la Russie, p. 173.

Aphis malvae Koch. Lichtenstein, La Flore.

Aphis medicaginis Koch. Lichtenstein, La Flore.

Aphis plantaginis Schrank. Lichtenstein, La Flore.

HIBISCUS. Rose Mallow.

H. rosasinensis L.

Aphis gossypii Glover. Fullaway, 1909, p. 40.

H. sp.

Aphis malvae Walker. Williams, 1891, p. 14. Aphis medicaginis Koch. Macchiati, 1883, p. 255. Rhopalosiphum dianthi (Schrank). Williams, 1891, p. 14.

LAVATERA.

L. arborea L.

Aphis malvae Koch. Ferrari, 1872, p. 64.

L. assurgentiflora Kellogg.

Rhopalosiphum persicae (Sulzer). Essig, 1917a, p. 331.

L. trimestris L.

Aphis malvae Koch. Passerini, Flora.

MALOPE.

M. trimestri.

Aphis malvae Koch. Passerini, 1863, p. 36.

MALVA. Mallow.

M. moschata L. Musk Mallow.

Siphonophora urtica Koch. (Aphis Schrank). Passerini, 1863, p. 14.

M. parviflora L.

Aphis malvac Koch. Del Guercio, 1909 (1910), Redia VII, p. 298. Myzus achyrantes Monell. Davidson, 1909, p. 303.

Myzus persicae (Sulzer). Essig, 1911c, p. 600.

M. rotundifolia L. Common Mallow. Cheeses. (neglecta).

Acyrthosiphon skrjabini Mordwilko. Mordwilko, 1914, Faune de la Russie, p. 181.

Aphis cardui Linn. Kaltenbach, 1874, p. 381.

Aphis gossypii Glover. (citrifolii Ashm., in part) (citrulli Ashm.) (cucumeris Forbes) (forbesi Weed?). Pergande, 1895, p. 314.

Aphis malvae Koch. Theobald, 1911-12.

Aphis urticae Fab. Bayer, 1914a, p. 111.

Aphis urticaria Kalt. Kaltenbach, 1874, p. 69.

Chaitophorus sp. Gillette, 1909a, p. 388.

Myzus achyrantes (Monell). Williams, 1891, p. 17.

M. sylvestris L. High Mallow.

Aphis addita Walker, Walker, 1849c, p. 33.

Aphis cardui Linn. (A. onopordi Schrank). Kaltenbach, 1843, p. 115.

Aphis malvae Koch. Passerini, 1863, p. 36.

Aphis urticac Fab. Bayer, 1914a, p. 111.

Siphonophora pclargonii (Kalt.) Koch (pallida Walker) (fragariae Walker?) (diplantherae Koch?) (malvae Pass.). Buckton, 1, p. 137.

Siphonophora urticac (Kalt.) Koch. Buckton, 1, p. 144.

M. sp.

Aphis cupatorii Passerini. Del Guercio, 1909 (1910), Redia VII, p. 297.

Aphis gossypii Glover. (malvae Koch) (cucubiti Buckton). van der Goot, 1915, p. 198.

Aphis malvae Mosley. Lichtenstein, La Flore.

Aphis malvae Koch. Ferrari, 1872, p. 64.

Aphis malvae Walker. Buckton, 2, p. 43.

Macrosiphum diplantherae Koch. Theobald, 1913, p. 54.

Macrosiphum malvae (Mosley). Theobald, 1913, p. 150.

Macrosiphum malvicola Matsumura. Matsumura, 1917a, p. 359.

Macrosiphum pelargonii Buckton. Theobald, 1913, p. 54.

Myzus persicae Sulzer. (achyrantes Monell?) (malvae Oestlund?). Gillette and Taylor, 1908, p. 137.

Siphocoryne alboapicalis Theobald. Theobald, 1916f, p. 183.

MALVASTRUM. False Mallow.

M. coccineum. A. Gray. Red False Mallow.

Myzus circumflexum (Buckton) (vincae Gillette). Davis, 1914, p. 122. Can. Ent.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 36.

STERCULIACEAE.

THEROBROMA.

T. Cacao L.

Toxoptera theobromae Schouteden. Schouteden, 1906b, p. 38 (2).

TERNSTROEMIACEAE. TEA OR CAMELLIA FAMILY. CAMELLIA.

C. drupifera (oleifera).

Toxoptera aurantii Boyer. (Aphis) (A. camelliae Kalt.). Ferrari, 1872, p. 62.

C. japonica.

Toxoptera aurantii Boyer. (Aphis) (A. camelliae Kalt.). Ferrari, 1872, p. 62. Essig, 1917a, p. 330.

C. Thea Link.

Ceylonia theaccola Buckton. Experiment Station Record, 1903-4, (1904), p. 277.

C. sp.

Toxoptera aurantii Boyer. (T. camelliae Kaltenbach) (Ceylonia theaecola Buckton). Phillips and Davis, 1912, p. 8.

HYPERICACEAE. SAINT JOHN'S-WORT FAMILY. HYPERICUM. Saint John's-wort.

H. crispum L.

Aphis chloris Koch. Macchiati, 1883, p. 239.

H. hirsutum L.

Aphis papaveris Fab. Kaltenbach, 1874, p. 269. Aphis rumicis Linn. Walker, 1850a, p. 19.

H. kalmianum L. Kalm's Saint John's-wort.

Aphis hyperici Monell, Monell, 1879, p. 25.

H. perforatum L. Common Saint John's-wort.

Aphis chloris Koch. Ferrari, 1872, p. 65.

Aphis papaveris Fab. Kaltenbach, 1874, p. 269.

Aphis rumicis Linn. Walker, 1850a, p. 19.

H. prolificum L. Shrubby Saint John's-wort.
Myzocallis hyperici Thomas. Thomas, 1879, p. 109.

H. quadrangulum L.

Aphis papaveris Fab. Kaltenbach, 1874, p. 269.
Aphis rumicis Linn. Walker, 1850a, p. 19.

H. Sarothra Michx. (gentianoides).

Aphis maidi-radicis Forbes. Vickery, 1910, p. 103.

TAMARICACEAE.

TAMARIX.

T. sp.

Aphis rumicis L. (evonymi Fab.) (papaveris Fab.) (atriplicis Fab.) (genistae Scopoli). van der Goot, 1915, p. 225.

Aphis tamaricis Licht. Lichtenstein, 1885a, p. CLXXIX.

CISTACEAE. ROCKROSE FAMILY.

CISTUS.

C. crispus L.

Aphis cisti Lichtenstein. Del Guercio, 1909 (1910), Redia VII, p. 297.

C. hirsutus.

Aphis cisti Lichtenstein. Del Guercio, 1909 (1910), Redia VII, p. 297.

C. sp.

Aphis cisti Licht. (ined.). Lichtenstein, La Flore.

Myzus targonii Del Guercio. (M. ribis? Linn., Ferrari). Del Guercio, 1900, p. 152.

HELIANTHEMUM. Rockrose.

H. vulgare Gaertn. Fruct.

Aphis helianthemi Ferrari. Ferrari, 1872, p. 65.

VIOLACEAE. VIOLET FAMILY.

VIOLA. Violet.

V. nuttallii.

Myzus circumflexum (Buckton) (vincae Gillette). Davis, 1914, p. 122. Can. Ent.

V. odorata L. English or Sweet Violet.

Siphonophora malvac (Mosley) Pass. (A. pelargonii Kalt.) (A. pallida Walker) (S. pelargonii Koch) (S. diplantherae Koch). Passerini, 1863, p. 14.

V. tricolor L. Pansy. Heart's-ease.

Aphis certa Walker. Walker, 1849c, p. 32.

Aphis insessa Walker. Walker, 1849c, p. 32.

Aphis violae Scouteden. Schouteden, 1906a, p. 229.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 36.

Siphonophora malvac Mosley. (A. pelargonii Koch) (A. pallida Walker) (S. pelargonii Koch) (S. diplantherae). Macchiati, 1883, p. 230.

V. sp.

Idiopterus nephrelepidis Davis. Essig, 1911b, p. 541.
Rhopalosiphum tulipaella Theobald. Theobald, 1916f, p. 148.
Rhopalosiphum violae Pergande. Pergande, 1900b, p. 29. Sanborn, 1904, p. 65.

LOASACEAE. LOASA FAMILY.

MENTZELIA.

M. nuda Pursh.

Nectarophora sp. Cowen. Cowen, 1895, p. 125.

M. sp.

Macrosiphum mentzeliae Wilson, Wilson, 1915b, p. 99.

BEGONIACEAE.

BEGONIA.

B. sp.

Aphis gossypii Glover. (citrifolii Ashm., in part) (citrulli Ashm.) (cucumeris Forbes) (forbesi Weed?). Pergande, 1895, p. 314. Aphis opima Buckton. Theobald, 1911-12.

Macrosiphum begoniae Schouteden. Schouteden, 1901, p. 117.

1906а, р. 238,

CACTACEAE. CACTUS FAMILY.

CACTUS.

C. sp.

Aphis dianthi Schrank. Walker, 1850a, p. 394.

OPUNTIA. Prickly Pear.

O. vulgaris Mill.

Aphis papaveris Fab. Macchiati, 1883, p. 256.

O. sp.

Myzus persicae Sulzer. Gillette and Taylor, 1908, p. 36.

THYMELAEACEAE. MEZEREUM FAMILY.

DAPHNE. Mezereum.

D. sp.

Macrosiphum hibernaculorum (Boyer). Theobald, 1916f. Siphonophora gnidii Licht. (ined.). Lichtenstein, La Flore.

PIMILEA.

P. sylvatica.

Aphis dianthi Schrank. Walker, 1850a, p. 394.

ELAEAGNACEAE. OLEASTER FAMILY.

ELAEAGNUS.

E. angustifolia L.

Rhopalosiphum hippophaes (Myzus elaeagni Del Guercio, Davis, 1908) Gillette, 1915, Jour. Ec. Ent. Vol. 8, p. 376.

E. argentea Pursh. Silver-berry.

Capitophorus (Myzus) braggii Gillette. van der Goot, 1915, p. 120.

E. sp.

Myzus braggii Gillette. Gillette, 1915, Jour. Ec. Ent. Vol. 8, p. 376.

HIPPOPHAE.

H. rhamnoides L.

Myzus braggii Gillette. Gillette, 1915, Jour, Ec. Ent. Vol. 8, p. 376.

Rhopalosiphum hippophaes Koch. Gillette, 1915, Jour. Ec. Ent. Vol. 8, p. 376.

SHEPHERDIA.

S. argentea Nutt.

Capitophorus shepherdiae G. and B. Gillette and Bragg, 1916, p. 445.

S. arvensis.

Myzus braggii Gillette. Gillette, 1915, Jour, Ec. Ent. Vol. 8, p. 376.

LYTHRACEAE. LOOSESTRIFE FAMILY.

AMMANNIA.

A. sp.

Rhopalosiphum nymphacae (Linn.). Williams, 1891, p. 5.

CUPHEA. (Parsonsia).

C. Bustamanta Lex. (platycentra).

Aphis malvae Walker. Williams, 1891, p. 8.

C. ignea DC. (Parsonia platycentra).

Aphis malvae Walker. Hunter, 1901, p. 127.

C. sp.

Aphis gossypii Glover. Fullaway, 1909, p. 40.

Siphonophora malvae (Mosley) Pass. (A. pelargonii Kalt.) (A. pallida Walker) (S. pelargonii Koch) (S. diplantherae Koch). Passerini, 1863, p. 14.

LAGERSTROEMIA.

L. indica L.

Myzocallis kahawaluokalani Kirkaldy. Fullaway, 1909, p. 43.

L. sp.

Aphis lagerstrocmiae Licht. (ined.). Lichtenstein, La Flore.

LYTHRUM. Loosestrife.

L. Salicaria L. Spiked Loosestrife.

Aphis lythri Schrank. Kaltenbach, 1874, p. 254. Theobald, 1911-12. Aphis salicariae Koch. Kaltenbach, 1874, p. 254. Myzaphis lythri Schrank. van der Goot, 1915, p. 185.

PUMICA.

P. Granatum L.

Aphis punicae Pass. Ferrari, 1872, p. 69.

MYRTACEAE.

MYRTUS.

M. sp.

Aphis dianthi Schrank. Walker, 1850a, p. 394. Rhopalosiphum persicae Sulzer. Lichtenstein, Flore Supplement.

ONAGRACEAE. EVENING PRIMROSE FAMILY.

CLARKIA.

C. elegans Dougl.

Rhopalosiphum persicae (Sulzer). Essig, 1917a, p. 331.

EPILOBIUM. Willow-herb.

E. adenocaulon occidentale Trelease.

Aphis oenotherae Oestlund. Essig, 1917a, p. 341.

E. angustifolium L. (spicatum Lam.) Great Willow-herb. Fireweed.

Aphis epilobii Kalt. Cockerell, 1903b, p. 114.

Nectarophora sp. Cowen. Cowen, 1895, p. 124.

E. Dodonaei.

Aphis plantaginis Schrank. (A. dauci Fab.). Passerini, 1863, p. 40.

E. hirsutum L.

Aphis epilobii Koch. Theobald, 1911-12.

E. montanum L. (pubescens).

Aphis epilobii Kalt. Buckton, 2, p. 71.

Aphis instabilis Buckton. Buckton, 2, p. 95.

Aphis penicillata Buckton, 2, p. 52.

Macrosiphum ulmariae (Schrank) (gei Koch) (urticae Kalt?) van der Goot, 1915, p. 104.

Siphonophora ulmariae (Schrank, Walker) (onobrychis Boyer) (pisi Kalt.) (pisi Koch) (gei Koch). Passerini, 1863, p. 13.

E. parviflorum Schreb.

Aphis epilobii Koch. Theobald, 1911-12.

Aphis instabilis Buckton. Buckton, 2, p. 95.

E. virgatum Cunn.

Aphis virgata Del Guercio. Del Guercio, 1909 (1910), Redia VII, p. 297.

E. sp.

Anuraphis myosotidis Koch. Del Guercio, 1909 (1910), Redia VII, p. 297.

Aphis despecta Walker. Walker, 1849c, p. 53.

Aphis diphaga Walker, Walker, 1852, p. 1042.

Aphis epilobiina Walker. Walker, 1849c, p. 53.

Aphis malvae Walker. Buckton, 2, p. 43.

Aphis oenotherae Oestlund. Clarke, 1903, p. 252.

Aphis pollinosa Walker. Walker, 1849c, p. 52.

Aphis praeterita Walker. Walker, 1849c ,p. 52.

Aphis tincta Walker, Walker, 1849c, p. 51.

Aphis triphaga Walker, Walker, 1852, p. 1041.

Nectarophora epilebii Pergande. Pergande, 1900a, p. 516.

FUCHSIA.

F. coccinea Ait.

Aphis dianthi Schrank. Kaltenbach, 1874, p. 48.

F. globosa Lindl.

Aphis dianthi Schrank. Kaltenbach, 1874, p. 48.

F. gracilis.

Rhopalosiphum dianthi (Schrank) Koch (persicae, Puceron du pecher Morren) (rapae Curtis) (floris-rapae Curtis) (dubia? Curtis) (vastator Smee) (A. persicaecola Boisduval) (Rh. persicae Pass.). Buckton, 2, p. 17.

F. macrantha Hook.

Aphis dianthi Schrank. Kaltenbach, 1874, p. 48.

GUARA.

G. parviflora Doughl.

Nectarophora sp. Cowen. Cowen, 1895, p. 124. Siphonophora gaurae Williams. Williams, 1910 (1911), p. 80. Siphonophora gaurina Williams. Williams, 1910 (1911), p. 80.

OENOTHERA. Evening Primrose.

O. bectiana.

Aphis oenotherae Oestlund. Clarke, 1903, p. 252.

O. biennis L.

Aphis gossypii Glover. Sanborn, 1904, p. 57.
Aphis oenotherae Oestlund. Cowen, 1895, p. 121.
Myzus biennis Sanborn. Sanborn, 1904, p. 78.
Myzus oenotherae Williams. Williams, 1910 (1911), p. 65.
Pemphigus oenotherae Williams. Williams, 1891, p. 11.
Siphonophora sp. Williams, 1891, p. 11.

O. caespitosa Nutt.

Aphis oenotherae Oestlund. Cowen, 1895, p. 121.

O. grandiflora Ait.

Aphis oenotherae Oestlund. Essig, 1917a, p. 341.

O. serrulata Nutt.

Aphis oenotherae Oestlund. Williams, 1891, p. 11.

O. sp.

Anoecia oenotherae Wilson. Wilson, 1911, p. 64.

Anoecia querci (Fitch) (Eriosoma querci Fitch) (Rhizobius eleusinis Tinos.) (Schizoneura panicola Thos.) (Anoecia corni American authors) (?Anoecia oenotherac Wilson). Baker, 1916, p. 363.

TRAPA. Water Nut.

T. natans L. Water Chestnut.

Rhopalosiphum nymphaeae Koch. Passerini, Flora.

HALORAGIDACEAE. WATER MILFOIL FAMILY.

MYRIOPHYLLUM. Water Milfoil.

M. verticillatum L.

Rhopalosiphum nymphaeae Linn. (Aphis aquaticus Jackson). Davis, 1910a, p. 245.

ARALIACEAE. GINSENG FAMILY.

ACANTHOPANAX.

A. ricinifolium.

Aphis acanthopanaci Matsumura. Matsumura, 1917a, p. 356.

ARALIA.

A. cordata.

Arimakia araliae Matsumura. Matsumura, 1917a, p. 363.

A. hispida Vent. Bristly Sarsaparilla. Wild Elder.

Aphis (Adactynus) aralia-hispida Raf. Rafinesque, 1817.

A. sinensis.

Arimakia araliae Matsumura. Matsumura, 1917a, p. 363. Arimakia taranbonis Matsumura. Matsumura, 1917a, p. 363.

HEDERA.

H. Helix L. English Ivy.

Aphis hederae Kalt? Essig, 1917a, p. 339.

Aphis hederae Kalt. Buckton, 2, p. 75.

? Aphis lychnidis Linn. Buckton, 2, p. 74.

Aphis rumicis Linn. (fabae Kirby) (genistae Scop.) (ulicis Fab?) (euphorbiae Kalt?) (dahliae Mosley) (Cinara rumicis Mosley) (Rumicifex Amyot) (Genistifex Amyot). Buckton, 2, p. 84.

Myzus persicae (Sulzer). Essig, 1911c, p. 600.

Pemphigus hederae Horvath.

UMBELLIFERAE. PARSLEY FAMILY.

AEGOPODIUM. Goutweed.

A. Podagraria L.

Aphis capreae Fab. (A. aegopodii Scopoli). Kaltenbach, 1843, p. 110.

Aphis papaveris Fab. Kaltenbach, 1874, p. 269.

Siphocoryne capreae (Fab.) Theobald, 1912. Rept. Ec. Zool. p.

A. sp.

Aphis rumicis Linn. Walker, 1850a, p. 19.

AETHUSA. Fool's Parsley.

A. Cynapium L.

Aphis papaveris Fab. Kaltenbach, 1874, p. 269.

A. sp.

Aphis rumicis Linn. Walker, 1850a, p. 19.

ANGELICA.

A. sylvestris L.

Aphis angelicae Koch. Koch, p. 52.

Aphis capreac Fab. (A. aegopodii Scopoli). Kaltenbach, 1843, p. 110.

Aphis rumicis Linn. Walker, 1850a, p. 19.

Cavariella gigliolii Del Guercio. Del Guercio, 1909 (1910), Redia VII, p. 298.

Siphocoryne angelicae Del Guercio. Del Guercio, 1909 (1910), Redia VII, p. 298.

A. tomentosa Wats.

Aphis cari Essig. Essig, 1917a, p. 320.

A. sp.

Aphis angelicae Koch. Wilson, 1909b, p. 348.

ANTHRISCUS. Chervil.

A. sylvestris Hoffm. (Chaerophyllum sylvestre).

Aphis pisi Kalt. Kaltenbach, 1874, p. 118.

Macrosiphum ulmariae Schrank (gei Koch) (urticae Kalt?). van der Goot, 1915, p. 104.

A. vulgaris Bernh.

Aphis anthrisci Kalt. Kaltenbach, 1843, p. 112.

A. sp.

Aphis papaveris Fab. Kaltenbach, 1874, p. 288.

Aphis rumicis (evonymi Fab.) (papaveris Fab.) (atriplicis Fab.) (genistae Scopoli). van der Goot, 1915, p. 225.

Siphonophora ulmariac Schrank. Lichtenstein, Flore Supplement.

APIUM.

A. graveolens L. Garden Celery.

Aphis inculta Walker. Walker, 1849c, p. 43.

Aphis lappae Koch. Passerini, 1863, p. 51. Theobald, 1911-12.

Myzus lycopersici Clarke. Davis, 1914, p. 134. Can. Ent.

Rhopalosiphum dianthi Schrank. G. C. Davis, 1893, p. 40.

Siphocoryne avenac (Fab.) (mali Fitch) (prunifoliae Fitch) (avenae Fitch) (annuae Oestlund) (fitchii Sanderson) (Siphonophora avenae Thos. in part). Pergande, 1904a, p. 8.

Siphocoryne pastinaceae Linn. Buckton, 2, p. 24.

Siphocoryne pastinaceae Linn. Cockerell, 1903b, p. 114.

ARCHANGELICA.

A. atropurpurea Hoffm.

Siphocoryne archangelicae Oestlund. Oestlund, 1887, p. 70.

A. sp.

Aphis archangelicae Scop. Lichtenstein, Flore Supplement.

CARUM. Caraway.

C. kelloggii Gray. Wild or Sweet Anise.

Aphis cari Essig. Essig, 1917a, p. 320.

Siphocoryne capreae (Fab.). Essig, 1917a, p. 342.

C. sp.

Siphocoryne capreae Fab. (aegopodii Scopoli) (umbellatorum Koch) (cicutae Koch). van der Goot, 1915, p. 163.

CAUCALIS. (Turgenia).

C. latifolia L. (Turgenia latifolia L.).

Aphis papaveris Fab. (A. fabae Scop.) (A. aparines Schrank). Passerini, 1863, p. 46.

CHAEROPHYLLUM.

C. temulum L.

Aphis capreae Fab. (aegopodii Scopoli). Kaltenbach, 1843, p. 110. Aphis chaerophilli Koch. Koch, p. 80. Aphis pisi Kalt. Kaltenbach, 1874, p. 118.

C. tuberosum.

Aphis chaerophylii Koch. Theobald, 1915b.

C. sp.

Siphocoryne capreae Fab. Lichtenstein, La Flore. Siphonophora ulmariae (Schrank, Walker) (onobrychis Boyer) (pisi Kalt.) (pisi Koch) (gei Koch). Passerini, 1863, p. 13.

CICUTA. Water Hemlock.

C. maculata L. Spotted Cowbane. Musquash Root. Beaver Poison.

Nectarophora sp. Osborn-Sirrine. Hunter, 1901. p. 123.

C. virosa L.

Rhopalosiphum cicutae Koch. Koch, p. 24. Rhopalosiphum nymphaeae (Linn.) Koch (A. butomi Schrank) (R. najadum Koch). Passerini, 1863, p. 21.

CONIUM. Poison Hemlock.

C. maculatum L.

Aphis capreae Fab. (cicutae Koch). Kaltenbach, 1874, pp. 291, 266.

Aphis capreae Fab. (A. aegopodii Scopoli). Kaltenbach, 1843, p. 110.

Aphis xylostei Schrank (lonicerae Boyer). Kaltenbach, 1874, p. 307.

Hyadaphis xylostei Schrank. (Siphocoryne conii Davidson). Davidson, 1914, Jour. Ec. Ent., Vol. 7, p. 134.

C. sp.

Siphocoryne foeniculi Pass. Lichtenstein, La Flore.

CRITHMUM.

C. maritimum L.

Aphis crithmi Buckton. Buckton, 1886, p. 324.

CRYPTOTAENIA. Honewort.

C. Canadensis DC. (Chaerophyllum canadense).

Aphis chenophyllum-canadense Raf. Rafinesque, 1817.

DAUCUS. (Orlaya). Carrot.

D. Carota L.

Aphis assucta Walker. Walker, 1849c, p. 49.

Aphis carotae Koch. Graells, 1887, p. 11.

Aphis dauci Fab. Graells, 1887, p. 11.

Aphis lappac Koch. Graells, 1887, p. 11.

Aphis papaveris Fab. Graells, 1887, p. 11.

Aphis papaveris Fab. (A. fabae Scop.) (A. aparines Schrank). Passerini, 1863, p. 46.

Aphis plantaginis Fab. Kaltenbach, 1874, p. 56.

Aphis plantaginis Schrank. (dauci Fab.). Ferrari, 1872, p. 66. Theobald, 1916f, p. 183.

Aphis plantaginis Schrank. Graells, 1887, p. 11.

Aphis rumicis Linn. Walker, 1850a, p. 19.

Aphis subterranca Walker. (A. carotae Koch). Buckton, 2, p. 38.

Aphis umbellatarum Kalt. Graells, 1887, p. 11.

Forda dauci Gureau. Graells, 1887, p. 11.

Siphocoryne capreae (Fab.) (not pastinaceae Koch). Theobald, 1912, Rept. Ec. Zool., p. 88.

Siphocoryne foeniculi Pass. Graells, 1887, p. 11.

Siphocoryne pastinaceae Linn. Buckton, 2, p. 24.

D. foliosus Guss.

Aphis carotac Koch. Macchiati, 1883, p. 239.

D. sp.

Aphis umbellatorum Koch. Lichtenstein, La Flore. Siphocoryne capreae Fab. (aegopodii Scop.) (umbellatorum Koch) (cicutae Koch). van der Goot, 1915, p. 163.

ERYNGIUM. Eryngo.

E. campestre L.

Aphis dispar Walker. Walker, 1848c, p. 2251. Aphis diversa Walker. Walker, 1848c, p. 2251. Aphis papaveris Fab. Macchiati, 1883, p. 256. Aphis rumicis Linn. Walker, 1850a, p. 19.

FALCARIA.

F. vulgaris Bernh. (Sium falcatum).

Aphis sii Koch. Kaltenbach, 1874, p. 271.

FERULA.

F. sp.

Myzus ferulaginis Macchiati. Lichtenstein, Flore Supplement. Vacuna ferulae Macchiati. Lichtenstein, Flore Supplement.

FOENICULUM. Fennel.

F. vulgare Mill. (officinale ALL.).

Aphis saliceti Kaltenbach. Patch, 1917a, p. 417. Siphocoryne foeniculi Pass. Clarke, 1903, p. 252.

F. sp.

Aphis capreae Fab. (foeniculi Pass.) (cicutae Koch). Kaltenbach, 1874, p. 275.

HERACLEUM. Cow Parsnip.

H. lanatum Michx.

Aphis heraclii Cowen. Cowen, 1895, p. 120. Aphis saliceti Kaltenbach. Patch, 1917a, p. 417.

H. mantegazzianum S&L.

Aphis heraclei Cowen. (not Koch). Essig, 1917a, p. 339.

H. Sphondylium L.

Aphis heraclei Koch. Koch, p. 51.

Aphis umbellatorum Koch. Theobald, 1911-12.

Hyalopterus spondylii Koch. Koch, p. 18.

Phorodon galeopsidis (Kalt.) Pass. (Walker ex parte). Passerini, 1863, p. 19.

Siphocoryne capreae (Fab.). Theobald, 1912, Rept. Ec. Zool., p. 88.

H. sp.

Siphocoryne capreae Fab. (aegopodii Scopoli) (umbellatorum Koch) (cicutae Koch). van der Goot, 1915, p. 163.

HYDROCOTYLE. Water Pennywort.

H. sp.

Aphis nymphaeae L. Kaltenbach, 1874, p. 20.

LEVISTICUM. Lovage.

L. sp.

Aphis ligustici Fab. Kaltenbach, 1874, p. 278.

LIGUSTICUM. Lovage.

L. scoticum L. Scotch Lovage.

Aphis ligustici Fab. Kaltenbach, 1843, p. 140.

L. sp.

Nectarophora martini Cockerell. Cockerell, 1903a, p. 171.

MUSENIUM.

M. tenuifolium Nutt.

Aphis penstemonis Williams. Williams, 1910 (1911), p. 54. "Evidently this species."

OENANTHE. Phellandrium.

O. crocata L.

Aphis umbellatorum Koch. Theobald, 1911-12.

O. sp.

Aphis oenanthis Licht. (ined.). Lichtenstein, La Flore. Aphis papaveris Fab. Kaltenbach, 1874, p. 275.

PASTINACA. Parsnip.

P. sativa L.

Aphis capreae Fab. (A. aegopodii Scopoli). Kaltenbach, 1843, p. 110.

Aphis carotae Koch. Ferrari, 1872, p. 72.

Aphis cicutae Koch. (capreae Fab.). Kaltenbach, 1874, p. 266.

Aphis heraelii Cowen. Cowen, 1895, p. 120. Aphis robusta Walker. Walker, 1849c, p. 43.

Aphis rumicis Linn. Walker, 1850a, p. 19.

Aphis saliceti Kaltenbach. Patch, 1917a, p. 417.

Rhopalosiphum pastinaceae (L). Koch. (A. capreae Fab.) (R. cicutae Koch). Koch, pp. 41-42.

Siphocoryne capreae (Fab.) (not pastinaceae Koch). Theobald, 1912. Rept. Ec. Zool., p. 88.

Siphocoryne foeniculi Pass. Passerini, 1860, p. 37.

P. sp.

Siphocoryne capreae Fab. (aegopodii Scopoli) (umbellatorum Koch) (cicutae Koch). van der Goot, 1915, p. 163.

PETROSELINUM. Parsley.

P. hortense Hoffm. Common Parsley.

Rhopalosiphum capreae (Fab.) Gillette, 1911, p. 323.

PEUCEDANUM. (Anethum).

P. alsaticum L. (Anethum.).

Aphis papaveris Fab. (A. fabae Scop.) (A. aparines Schrank). Passerini, 1863, p. 46.

P. palustre Moench.

Aphis rumicis Linn. (fabae Kirby) (genistae Scop.) (ulicis Fab?) Euphorbiae Kalt?) (dahliae Mosley) (Cinara rumicis Mosley) (Rumicifex Amyot) (Genistifex Amyot). Buckton, 2, p. 84.

P. sp.

Siphonophora capreae Fab. Lichtenstein, Flore Supplement.

PIMPINELLA.

P. magna L.

Aphis anthrisci Kalt. Kaltenbach, 1874, p. 273. Aphis pimpinellae Kalt. Kaltenbach, 1874, p. 273.

P. Saxifraga L.

Aphis anthrisci Kalt. Kaltenbach, 1874, p. 273. Aphis pimpinellae Kalt. Kaltenbach, 1874, p. 273.

SANICULA. Sanicle.

S. canadensis L.

Aphis saniculae Williams, Williams, 1910 (1911), p. 56.

SCANDIX. Venus' Comb.

S. Pecten-Veneris L.

Aphis papaveris Fab. Kaltenbach, 1874, p. 269.

SESELI.

S. sp.

Aphis seselii Licht. (ined.). Lichtenstein, La Flore.

SIUM.

- S. falcatum. See Falcaria vulgaris.
- S. latifolium L.

Aphis rumicis Linn. Walker, 1850a, p. 19.

THASPIUM. Meadow Parsnip.

T. aurem Nutt.

Aphis thaspii Oestlund. Oestlund, 1887, p. 58.

TORDYLIUM.

T. apulum L.

Aphis carotae Koch. Macchiati, 1883, p. 239.

TORILIS.

T. Anthriscus (L). Bernh. (Caucalis Anthriscus).
 Aphis anthrisci Kalt. Kaltenbach, 1874, p. 273.
 Aphis papaveris Fab. Kaltenbach, 1874, p. 269.

UMBELLIFERAE.

U. sp.

Acyrthosiphon navozovi Mordwilko, 1914, Faune de la Russie, p. 196.

Siphocoryne pastinaceae Koch (not capreae Fab.). Theobald, 1912, Rept. Ec. Zool., p. 89.

EXPLANATION OF FIGURES

Figure 4. Showing antennae, thoracic wax-plates and hind tarsi, all drawn to same scale.

Prociphilus corrugatans? Spring migrant from Crataegus (67-12, 50-04): P. alnifoliae? Spring migrant from Amelanchier (27-06, 40-06, 29-10, 16-11): P. (Trama) erigeronensis. Fall migrant from Solidago (78-06); Apterous female from cultivated aster. P. sp. Fall migrants found alighting at base of trunk of Mountain Ash, Pyrus sp. (164-12).

Figure 5. Showing antennae, thoracic wax-plates and hind tarsi, all drawn to same scale.

Prociphilus tessellata. Spring migrant from Acer (24-11); fall migrant from Alnus (120-16): P. xylostei, spring migrant from Lonicera (53-14, 96-16): P. approximatus, spring migrant from Fraxinus (1-16-21): P. fraxinifolii, spring migrant from Fraxinus (62-09): P. venafuscus, spring migrant from Fraxinus (55-06, 85-11); fall migrant (100-08).

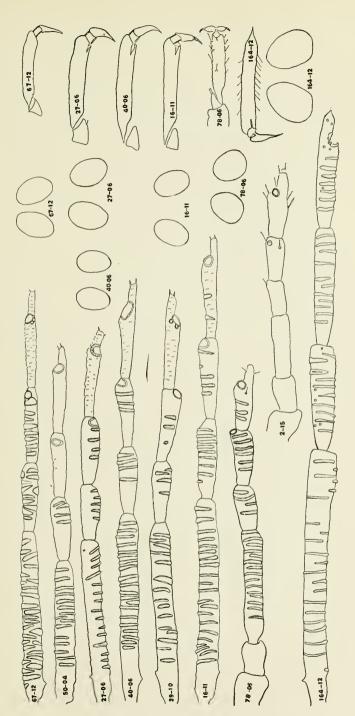


FIGURE 4.



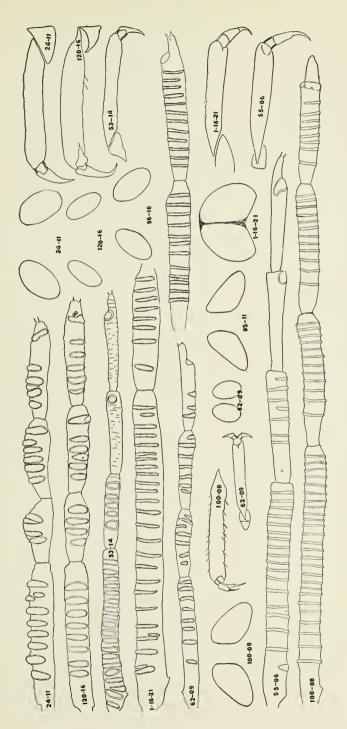


FIGURE 5.

